

Alternatives[®]

FOR THE HEALTH-CONSCIOUS INDIVIDUAL

June 2007

Volume 11, No. 24



Dr. David G. Williams

Politics as Usual, and Patients Pay

I was being interviewed recently, and one of the questions focused on natural therapies for cancer. The question didn't surprise me, because cancer remains one of the most common killers in this country, and also one of the most feared. In my search for natural cures and successful therapies, cancer has always been at the top of my list. Regrettably, it also remains at the top of the FDA's list when it comes to regulation, scrutiny, and harassment.

I speak often with researchers, scientists, and the management of nutraceutical companies, and the general feeling among those folks seems to be that developing or testing natural therapies for the treatment of cancer has almost become a losing proposition. History has demonstrated time and time again that the more successful the natural therapy is against cancer, the more fierce and ruthless the response will be from the FDA, the pharmaceutical industry, and established medicine. And this certainly hasn't gone unnoticed by various researchers and the nutraceutical companies.

Research into natural products to treat or cure cancer can be a serious threat to an individual's career, as well as to a company's long-term chances of survival. Realizing this, many in the industry are hesitant to even talk about a natural product for cancer these days—much less commit research funds to these products. As a result, we're seeing far more new products that focus on less controversial problems—such as obesity, lack of energy, and anxiety—in addition to hundreds of new “healthy” snacks and food products. And when I do run across new research in this area, it's commonly being performed outside this country.

Supplement companies have come to realize that, with the boot of the FDA hovering over their head, it's much easier to market an energy drink to millions than

to cater to a small segment of cancer patients. I don't have a solution to this problem, or know when or even if it will change. Rest assured, though, that I'll keep you up to date on products like these through *Alternatives*.

Stop a Cold, Heal Your Heart

There's been no shortage of articles written in this newsletter about the number-one killer in this country: cardiovascular disease. There's one associated problem, however, that has gotten far less “air time” both here and in other publications. That's angina (ann-JY-nuh).

The large majority of the time, angina itself isn't a disease. It's a symptom of cardiovascular disease, and one that's very often misunderstood.

In medical circles angina is often referred to as angina pectoris, which more precisely refers to chest pains behind the breastbone or sternum. The pain occurs when there is inadequate blood flow (read oxygen) to the heart muscle itself. More often than not, this condition is due



In This Issue

Politics as Usual, and Patients Pay	185
Stop a Cold, Heal Your Heart	185
Mailbox: Niacin for Alzheimer's	188
A Common Mineral Causes Uncommon Harm.	189
News to Use: Pulse Rate; Aspirin Risks; Muscles and Vitamin C; Bacteria and Anemia . . .	190

You will observe with concern how long a useful truth may be known, and exist, before it is generally received and practiced on. — Benjamin Franklin

to atherosclerosis, or clogging in the small coronary arteries that supply the heart muscle.

Anyone who's experienced angina will probably never forget the sensation. The common symptoms include an immediate increase in heart rate and blood pressure, accompanied by chest pain that has been described as squeezing, burning, tightness, pressure and/or heaviness. The pain is generally slightly to the left side of the breastbone and can radiate to the lower jaw, neck, shoulder, back, arm, and hand.

These are many of the exact same sensations that are experienced during a heart attack. I'm sure that's why thousands of men who experience this problem regularly will keep it to themselves and pray it goes away. With angina, this is generally the case...at least temporarily.

Most people may not want to admit it, but they know when they are experiencing angina. After several episodes a pattern begins to develop, and a certain level of activity or stress will trigger an episode.

It's important to keep in mind that not all episodes of chest pain stem from poor circulation to the heart.

As a general rule, if the pain lasts for less than 30 seconds, or if it goes away when you change positions, drink a glass of water, or take a deep breath, it isn't angina. It could be acid reflux, a strained intercostal muscle, a misaligned or broken rib, lung infection, or inflammation of the connective tissue attaching the ribs to the sternum.

On the other hand, if the episode of pain is prolonged and isn't relieved by rest, it may be a heart attack.

It's a Warning, Not an Assault

If you suffer from angina, it's important to understand that an episode of angina is *not* a heart attack. Angina is the pain and other symptoms experienced when the heart *temporarily* doesn't get enough blood (oxygen). This pain doesn't mean there's permanent, irreversible damage to the heart muscle. In fact, angina doesn't normally damage the heart. But that certainly doesn't mean you should downplay the problem. Angina is a strong warning signal indicating that steps

must be taken to improve your cardiovascular system before the problem progresses to heart attack. If you experience angina *before* a heart attack or heart failure, consider it a blessing. Then, by all means, immediately start taking action to reverse the problem.

(It bears repeating here that another tell-tale sign of atherosclerosis in men is often erectile dysfunction (ED). Erections are possible thanks to two main arteries in the penis. If blood flow becomes impeded due to blockages or plaque buildup, it becomes difficult to achieve or maintain an erection. And since the arteries in the penis are somewhat smaller than those supplying the heart, it's not unusual for problems to show up there first. For some reason, most doctors *don't* seem to see the connection between ED and heart or vascular disease, and often fail to alert the patient. I hate to say that ED is a blessing like angina but, in a way, it can also be an early warning signal of an impending heart attack or heart failure. [Editor's note: For more about effective ways to treat ED, see the Alternatives Subscriber Center at www.drdauidwilliams.com.])

Medical treatment generally consists of drugs to lower blood pressure and cholesterol, blood thinners, and some form of nitroglycerin to dilate blood vessels. It seems to be more and more common, however, to jump quickly to the next step and do either a balloon angioplasty or bypass surgery to improve blood flow.

I've covered alternative options extensively in the past. Hawthorn tea and extracts, coenzyme Q10, bromelain, magnesium, vitamin E, taurine, L-carnitine, garlic, lecithin granules, omega-3 oils (fish and flax oils), et cetera, are all therapeutic for heart conditions. Additionally, D-ribose (6 grams daily) has been shown to help stop exercise-induced angina, and creatine (5 grams daily) can help rebuild damaged heart muscle.

Obviously the above need to be combined with weight loss, a gradual increase in physical activity, a better diet, less stress, the elimination of sugar and refined carbohydrates in the diet, and a cessation of smoking.



ALTERNATIVES. Author: Dr. David Williams; Publisher: Robert Kroening; Editor: Bill Todd
ISSN# 0893-5025. Published monthly for \$69.99/yr. by Mountain Home Publishing at 7811 Montrose Road, Potomac, MD 20854. Editorial Office: 7811 Montrose Road, Potomac, MD 20854. Periodicals postage paid at Rockville, MD and at additional mailing offices.

POSTMASTER: Send address changes to *Alternatives*, PO Box 2050, Forrester Center, WV 25438. Copyright © 2007 All rights reserved. Photocopying or reproduction is strictly prohibited without permission from the publisher.

The approaches described in this newsletter are not offered as cures, prescriptions, diagnoses, or a means of diagnoses to different conditions. The author and publisher assume no responsibility in the correct or incorrect use of this information, and no attempt should be made to use any of this information as a form of treatment without the approval and guidance of your doctor.

Dr. Williams works closely with Mountain Home Nutritionals, a division of Doctors' Preferred, LLC and subsidiary of Healthy Directions, LLC, developing his unique formulations that supply many of the hard-to-find nutrients he recommends. Dr. Williams is compensated by Doctors' Preferred, LLC on the sales of these nutritional supplements and health products, which allows him to continue devoting his life to worldwide research and the development of innovative, effective health solutions.

I'm sure the heart-healthy regimen above isn't news to you. I've been preaching about it for decades. What you may not be familiar with is a simple 14-day program that, for many people, can quickly stop angina problems.

A Common Mineral Provides Uncommon Benefit

George Eby isn't that well-known, but his work with zinc lozenges in treating the common cold has received a bit of publicity during the last 20 plus years. It's truly unfortunate that more people don't know about his work, because it could help millions.

Eby helped conduct several studies that indicate that when the correct form of zinc is used (zinc acetate) as a lozenge, the duration and symptoms of a cold can be dramatically reduced.

One incidental finding to this work revealed that short periods of high-dose zinc could completely stop severe angina problems in many individuals.

When I spoke with Eby recently, he told me about a 65-year-old man who participated in a 1981 research study involving zinc and the common cold. It was a blinded study, which means the participants didn't know whether they were taking zinc or a placebo. In addition to having a cold, this particular gentleman also suffered from severe angina. Like the other participants, he was told to take 23 mg of zinc gluconate every two hours while awake to treat his cold symptoms. His cold symptoms were not responding to the zinc, so on the third day he took a total of 300 mg of zinc and continued with 276 mg on each remaining day of the seven day trial.

Following the seven-day trial this gentleman insisted that he be told what he'd been taking. He didn't care if it was a placebo or zinc. He wanted more. After five days his angina pain had vanished for the first time in 15 years. Prior to this he had used other medications, including nitroglycerin, with little relief. Now the pain was completely gone, his blood pressure was normal, and he showed no signs of heart damage.

After this study that same gentleman went snow skiing in Colorado for the first time in 15 years and experienced no discomfort. He later found a new job working for the railroad and felt fine working hard labor each day.

Additional clinical work was done using 180 mg of supplemental zinc daily with patients suffering from angina. At least 50 to 60 people were successfully treated in this manner, but unfortunately the clinical records are no longer available. In practically every case, if the patients stopped smoking and made some dietary changes (cut out refined carbohydrates and consumed less fat),

they responded favorably to this form of treatment. (*Med Hypotheses* 06;66(1):169-172)

By digging into earlier research, Eby found studies as far back as 1968 where doctors reported positive results using zinc in angina patients. One report found significant improvement in 12 of 16 patients using zinc therapy, and six of these used only zinc and didn't change their dietary, exercise, or smoking habits. (*Trace Substances in Environmental Health, conference 2nd Proceedings 1967-1968*)

Eby uncovered another report from Poland which found that individuals who worked in zinc mines had a 40 percent reduction in their incidence of angina when compared to individuals without any environmental zinc exposure. (*Part II: Coronary Disease, Przegl Lek* 80;37(6):507-510)

A Riddle Wrapped in a Mystery Inside a Capsule

Unfortunately there hasn't been a lot of follow-up work on the effects of zinc and angina to determine exactly how it works. Eby has shown that as far back as the 1960s there were reports indicating it was beneficial, but there's obviously not much interest from the pharmaceutical industry or anyone else doing research on a common mineral that can't be patented.

To be perfectly honest, I don't know exactly how it works. I'm not sure anyone does at this point. From the various reports I read, patients I've spoken with, and details of Eby's and others' observations, a short period of high-dosage zinc appears to have somewhat of a cleansing effect on arteries rather than simply increasing blood flow through dilation. We do know that zinc's antioxidant properties can prevent oxidation of the LDL form of cholesterol, which is one of the mechanisms of arteriosclerosis or clogging of the arteries. High doses of zinc also reduce inflammation, another contributor to artery plaques and clogging. And some researchers feel that a short period of high-dose zinc releases or "flushes" LDL cholesterol from cardiovascular tissues which, in turn, improves circulation and helps restore cardiac function.

This is definitely another case where more research would be helpful, but there never seems to be much interest in low-cost, do-it-yourself, therapies.

Take Sensible Precautions

One of the first concerns about any therapy is safety. The recommended daily dose for zinc varies depending on age and sex. Adult males require more zinc, and that's especially true for those who are sexually active since

NIACIN FOR ALZHEIMER'S

Question: I have a history of Alzheimer's in my family so it is a constant worry. I've read that smokers are 50 percent less likely to develop Alzheimer's than non-smokers. I don't want to start smoking, but would the use of nicotine patches be helpful? I've followed your suggestions about including omega-3 oils, curcumin, lecithin, acetyl-L-carnitine, et cetera, but after seeing the effects of Alzheimer's first-hand I'm willing to do most anything to prevent it.

—Sandra B.
Buffalo, New York

Answer: I certainly understand your concern. Alzheimer's is a horrible disease and currently the most common form of dementia. However, I don't think taking up smoking or the use of nicotine is the answer. There is an alternative.

Our old friend niacin, also called nicotinic acid, is a close cousin of nicotine. Niacin and nicotine both stimulate the production of the neurotransmitter acetylcholine.

Acetylcholine is needed for many things, primarily to facilitate the transmission of nerve impulses. Rather than use nicotine to increase acetylcholine, you can use niacin.

One recent study in Chicago selected 815 individuals without Alzheimer's disease, monitored clinical changes, and assessed their dietary niacin intake. After an average of four years, 131 in this group developed Alzheimer's disease.

After adjusting for all the important risk factors for the disease, those with the lowest niacin intake (an average of 12.6 mg per day) were 80 percent more likely to be diagnosed with Alzheimer's than those with the highest intake (22.4 mg per day). And even among those who didn't develop Alzheimer's, the cognitive decline

in those with the highest niacin intake was almost 44 percent of those with the lowest intake. (*J Neurol Neurosurg Psychiatry* 04 Aug;75:1093-1099)

Previous studies have linked other B vitamins—B12, B6, and folic acid—to a reduction in risk for Alzheimer's, but this is one of the first to look at niacin. And there is obviously a very strong connection to a lack of niacin. It just so happens that niacin and the other B vitamins are found in whole grains, which have largely been replaced by refined grain products. Other food sources of niacin are liver, fish, peanuts, and some mushrooms, which are not generally favorite foods of the general public. My dad is sharp as a tack and in his 80s, and it's probably no coincidence that he just happens to love peanuts. He keeps a huge jar by his favorite chair.

One factor that was overlooked by the above study is the widespread use of and exposure to organophosphate-containing pesticides, herbicides, solvents, and plasticizers. Organophosphates destroy acetylcholine. If you want to see what a case of Alzheimer's disease or Parkinson's disease looks like in fast motion, watch a bug after spraying it with pesticide. These chemicals are nerve agents that irreversibly inactivate acetylcholinesterase, which is essential to the production of the acetylcholine needed for nerve function in humans, animals, and insects. Pesticides and these other organophosphate-containing products kill by attacking the nervous system of insects—and of humans as well. I have never understood why we can't seem to connect the dots and see what's happening.

Niacin has dozens of other benefits that I've covered in past newsletters. It improves circulation, lowers harmful levels of cholesterol, and combats arthritis, just to name a few. At a cost of only pennies a day, it's undoubtedly one of the best bargains around.



semen contains high levels of zinc. The suggested daily intake for men is between 10 and 15 mg and for women that number may be roughly from about 7.5 to 10 mg. Based on the latest research, these recommendations are starting to look low—particularly if you're over 55.

A new study at Wayne State University School of Medicine found that zinc supplementation could reduce infections in the elderly. A group of 50 subjects ages 55 to 87 received either a placebo or tablet containing 45 mg of zinc gluconate each day for one year. (*Am J Clin Nutr* 07;85(3):837-844)

At the end of the year, those on the zinc supplement had a significantly lower number of infections. Additionally, blood markers that indicate inflammation

and oxidative stress were also reduced. There were no side effects or problems related to the zinc consumption. Keep in mind that inflammation and oxidative stress are two major contributors to the development of clogging of the arteries.

Very high doses of zinc taken for a long time could potentially cause problems, so a few precautions are in order. Studies have shown that a daily dosage of 300 mg for 30 days can suppress immunity in young adults, but a daily dose of 440 mg for 30 days can boost immunity in elderly adults. While the research to date seems a little confusing on this matter, the key is to not take the high doses for an extended period of time. The short-term dosages we're talking about for treating angina, however, haven't been shown to be a problem at all. In fact,

quite the opposite occurs. Studies show immune function improves. (*JAMA* 84 252(11);1443-1446) (*Am J Clin Nutr* 88;48(3):655-653) (*Am J Med* 81;70(5)1001-1004)

If high doses of zinc are taken for extended periods it's possible that the body's copper stores could be depleted. I don't think this would be an issue for the dosage and period of time we're talking about, but it's easy enough to supplement with a little copper before undertaking the high-zinc dosage program.

Putting the Program to Work

Most people don't need to take 300 mg a day like the gentleman I mentioned earlier. In fact, for most people, taking 60 mg of zinc three times daily is all that's necessary. (Eby felt that the only time a 300 mg daily dosage might be needed would be in individuals weighing 300 pounds or more.)

Also, based on Eby's clinical observations, many people needed only 4, 5, or 6 days of high-dose zinc therapy and not the full two weeks. Not only did most of the patients see total relief from their angina pain in that period, but their grayish to blackish skin tone disappeared and their overall circulation improved dramatically. (As an interesting side note, Eby told me that a patient's chronic, severe case of Raynaud's syndrome also cleared in seven days using 180 mg of zinc gluconate a day.)

In a nutshell, the research suggests that 180 mg of zinc should be taken daily in divided doses (60 mg with each meal). The best forms of zinc are the ones that are more biologically available. These would include zinc gluconate, chloride, acetate, glycinate, histidinate, or sulfate. The high dose can be stopped as soon as the angina stops, which is generally within the first seven days. The maximum period for taking the high-dose zinc would be 14 days. And finally, to prevent any possible problems with copper depletion, it is recommended that 4 to 6 mg of copper chloride be taken daily for 14 days prior to the high-dose zinc program.

Obviously underlying problems led to the angina in the first place, and those need to be corrected as well. Consumption of refined carbohydrates, high animal fat intake, smoking, lack of exercise, and vitamin/mineral deficiencies all need to be dealt with to achieve the best effects. Eby and others feel that many of the problems that can be corrected through the use of zinc stem from deficiencies in that mineral caused by the consumption of refined grains, which tend to deplete minerals in the body. As such, refined grain products (particularly white flour) should be replaced with whole grain products, nuts, and seeds in the diet. I've discussed this at length before, and the problems caused by eating a high glycemic diet.

Using high dose zinc to correct angina problems isn't something you're probably going to hear about either from your cardiologist or family physician. The first thought that usually comes to their mind when they hear the word angina is by-pass surgery. And it's probably the first thought of most patient's as well. That's why thousands are afraid to even mention the problem to their family or their doctor.

Large-scale clinical trials need to be performed to illustrate the benefits of zinc therapy. Hopefully, zinc therapy will be more widespread and accepted in the not-too-distant future. But maybe that's just wishful thinking on my part. As George Eby was quick to point out, the benefits of using zinc therapy for treating angina and atherosclerosis have been discussed in the medical literature since the 1960s. The evidence is there. Obviously, it's not a matter of whether it works or not. The ultimate test is whether it's profitable for someone to promote the procedure, and that's where zinc therapy comes up short.

A Common Mineral Causes Uncommon Harm

A few months ago I reported on a study showing that the average testosterone level in men was dropping at a rate of one percent a year, much faster than ever expected. Based on these findings, a 65-year-old man in 2002 averaged a 15 percent lower testosterone level than a 65-year-old man in 1987. (*J Clin Endocrinol Metab* 06;Oct 24 and Dec 5 (Epub))

At the time, I suspected this astounding decrease was linked to various estrogens and estrogen-like compounds we're being exposed to in our environment and water supplies.

New research has shown that a large part of the problem may stem from drinking fluoridated water. Roughly two-thirds of the drinking water in the US is now fluoridated.

Individuals in this country now consume an average of over 5 mg of fluoride daily compared to a little over 1 mg 50 years ago. This is the same time period that's seen a dramatic decrease in testosterone levels and fertility rates. (*J Toxic Clin Toxic* 34(2):183-189)

Fluoridated drinking water is supposed to contain between 0.7 to 1.2 mg per liter, but higher levels are common. Fluorine is actually a naturally occurring element, and only during World War II was it "extracted"—mainly for experimental purposes, and eventually for use

(Fluoride continued on page 192)



NEWS TO USE FROM AROUND THE WORLD

The Pulse of Longevity

PARIS, FRANCE—With all the medical research focused on high-tech methods to solve health problems, it seems like many of the basic “hands-on” tools and techniques fall by the wayside. If you go for a physical in most clinics they still routinely take your blood pressure and pulse rate. Of these two measures of heart performance, blood pressure obviously receives the greater attention. The value of knowing one's pulse rate seems to have been forgotten. It's a shame, because having a history of your pulse rate might be one of the more reliable tools to predict your mortality.

I've briefly discussed the importance of pulse rate and pulse pressures in the past. This latest research just confirms what a useful and accurate tool it is.

French researchers recently completed a study of 4,320 men, ages 42 to 53 years old, who were recruited between 1967 and 1972. Each of the men had yearly physical examinations and their health history was documented for the next 20 years. During that period 1,018 men died from various causes. (*Paper presented at the 2006 Scientific Sessions of the American Heart Association, Nov 15, 2006, Chicago. Abstract 4203*)

After adjustments were made for risk factors such as age, physical activity, tobacco consumption, body mass index, systolic blood pressure, blood glucose, and cholesterol, change in the pulse rate was a strong indicator of their chance of survival.

The resting heart rate was determined by taking their pulse for one full minute after the men were allowed to lie on their back for five minutes. In those whose heart rate increased by more than 7 bpm (beats per minute) over the course of the study there was a 47 percent increase in mortality when compared to men whose heart rate remained stable (stayed within 7 bpm of the original baseline). Additionally, men whose resting heart declined more than 7 bpm from their baseline figure experienced an 18 percent lower mortality. The greatest benefits from a drop in heart rate appeared in those men who initially had a rate of over 75 bpm to begin with.

In men whose heart rate remained relatively stable those with a rate of 75 bpm or higher had a 79 percent higher long-term mortality than those with a stable rate between 61 bpm and 75 bpm.

I should also point out that none of these individuals had any clinically detectable cardiovascular disease at the beginning of the study. Considering this and the fact that all the other risk factors above were taken into account, it appears that monitoring changes in your resting pulse rate is like looking at your future in a crystal ball.

If you've had regular physicals over a period of time, ask your doctor for pulse rates that were taken at the time. And it's easy enough to start monitoring your own resting pulse rate on a regular basis.

Honest Assessment of Aspirin

I almost fell out of my chair when I saw this latest release from the US Preventive Services Task Force.

For years aspirin has been the golden child of the medical community. It's been recommended as a method to prevent everything from heart attacks to colon cancer. Finally, it seems someone is weighing any potential benefits against the known risks.

If you're currently taking aspirin to prevent colon cancer, it's not worth the risk—as I've said before. Researchers at the University of Chicago reported that the use of *any* nonsteroidal anti-inflammatory drug (including aspirin and many other pain medications) carries an increased risk of bleeding. One or two people out of 100 using these drugs each year will have a major bleed that causes hospitalization, possible transfusion, and even death in many cases. Furthermore, several studies have now shown that aspirin doesn't really reduce one's risk of developing colon cancer.

When you take into account the increased risk in other conditions like stroke and liver or kidney failure, routine use of aspirin and other NSAIDs doesn't look so harmless.

Vitamin C for Muscle Health

GREENSBORO, NORTH CAROLINA—Research out of the University of North Carolina shows that muscle damage from exercise can be reduced with plain old vitamin C. In the study, 70 people were asked to do a series of elbow extensions with their non-dominant arm. For two weeks before the exercise, and four days after, half the participants took 3 grams of vitamin C daily, in divided doses. The other half took a placebo. The vitamin C group reported less muscle soreness immediately after the exercise, and at 4 and 24 hours afterward, than the placebo group. The vitamin C group also showed lower levels of a compound called creatine kinase, a marker of muscle breakdown. (*Int J Sport Nutr Exerc Metab* 06;16:270–280)

At one time it was thought that muscle soreness after vigorous exercise was due to a buildup of lactic acid in the muscles. When you're working harder than you're used to, your muscles use energy faster than it can be provided using normal sources. Your body then turns to another process that produces lactic acid. The excess acid is recirculated into glucose within an hour or two, though, so it turns out that this isn't the source of the soreness that appears the next day.

NEWS TO USE (CONTINUED)

Rather, the discomfort, called “delayed-onset muscle soreness,” comes from actual breakdown of muscle tissue. Under a heavy load for an extended period of time muscle fibers get microscopic tears and inflammation sets in—which explains why anti-inflammatory compounds relieve muscle soreness so well. Your body uses vitamin C to build connective tissue, and high levels of the vitamin may strengthen muscle fibers.

Even if you’re not one for engaging in extended exercise, there will be times when you’re more active than usual. A weekend of spring cleaning or clearing out the basement can leave you stiff and sore for days if you’re not used to the activity. And as summer comes on, I’m sure there will be some of you beginning your “combat gardening” (hours of working muscles you’re not used to exercising). I know of one woman who went to the hospital with chest pains after a day of gardening. Turns out it was simple muscle pain in the pectoral muscles in her chest.

It’s important to note that you need to be prepared for the activity; the participants in this study began taking their added vitamin C two weeks before the exercise activity. (A study released at about the same time as this one showed little or no benefit from vitamin C, but the participants in that research received their first dose just two hours before the exercise.) Even though vitamin C is water soluble, and any excess is filtered out through the kidneys, you can build up levels of the vitamin in your tissues simply by taking some extra beyond daily body needs. (*Br J Nutr* 06;95(5):976–981)

The researchers in this study chose the 3-gram dose because they had seen earlier work using this amount that suggested a benefit. I’ve long recommended that you take 2 grams of vitamin C daily as part of your normal health routine. I’m sure this lower amount would still give you some of the same benefits seen in the current study.

I should point out that the people in this study were performing an activity they weren’t used to. And though any reason to take better care of yourself is a good one, the best solution here isn’t to increase your intake of vitamin C, it’s to increase your overall activity level. As I wrote several years ago, you can get just as much benefit by increasing your daily activity level (taking the stairs, washing dishes by hand, et cetera) as you can by visiting a health club regularly. The secret, as the shoe company says, is to just do it.

Bacterial Balance or Bad Blood

JERUSALEM, ISRAEL—For some time now, the thinking in mainstream medicine has been that digestive ulcers are caused by the presence of bacteria called *Helicobacter pylori*. Supposedly these curly pathogens burrow their way into the mucous membranes lining

the stomach, where they weaken the membrane and allow digestive juices to penetrate to the sensitive stomach wall.

The problem with this theory, though, as I’ve written before, is that about half of all people are infected with *H. pylori* at this very moment, yet few of those people will go on to develop ulcers. It’s likely that the real problem is a bacterial imbalance that allows *H. pylori* to multiply and do its dirty work unimpeded.

A common therapy for the infection is a cocktail of three antibiotics. The trouble with that therapy, of course, is that using it will actually make the bacterial imbalance problem worse instead of better—because all the good bacteria will be killed off along with the bad ones.

Now researchers are looking at *H. pylori* as the culprit in another condition: iron-deficiency anemia (IDA). Most people with IDA are women in their premenopausal years. This makes sense, because of the regular blood loss these women experience as a result of menstruation. Among men, though, IDA is relatively uncommon.

In an effort to understand the problem, researchers at the Shaare Zedek Medical Center at Hebrew University in Jerusalem examined 44 men with IDA. In 15 they found a likely source of blood loss such as a bleeding ulcer. No likely cause was found among the other 29, but of that group 25 had *H. pylori* infection. The 29 men who had the “unexplained” IDA tended to be younger than the 15 who had been diagnosed with a bleeding condition, and earlier attempts at supplementation had less of an effect on their blood levels of iron. (*Blood Cells Mol Dis* 07;38(1):45–53. Epub 06 Oct 24)

Antibiotic therapy that eradicated the bacterial infection also cleared up the anemia in every patient. The authors came to the obvious conclusion, that getting rid of the offending bacteria would allow the return of normal iron levels. It’s just as likely, however, that balancing the bacterial environment in the stomachs of these patients would have given results that were just as positive.

The most certain way to create that balance is with fermented foods. The bacteria in foods such as yogurt and sauerkraut help re-establish the healthy environment in your stomach. I especially recommend sauerkraut. It’s been known for ages that cabbage juice can help heal a gastric ulcer, and I’d bet that the benefit comes from some effect on the action of *H. pylori*. (This is one instance where I don’t think a probiotic supplement is going to help. Any supplement that delivers live bacteria right to the gut is formulated specifically so it doesn’t expose those bacteria to stomach juices. You’ll have to stick with the sauerkraut.)

(Fluoride continued from page 189)

in building the atomic bomb. Following World War II, it was used to produce large quantities of various fluorocarbons for use in the production of plastics, pesticides, and pharmaceuticals. Practically every food now contains some fluoride. Plants get it from the soil and water. It's also found in fish and animal bone. But the amounts in unprocessed food are generally very small, ranging from 0.02 parts per million to 2.00 parts per million. The primary source for nearly everyone is fluoridated water—not only out of your tap, but also in food and drinks that have been processed using fluoridated water.

Here are just a few facts that the general public hasn't been told.

- Fluoride is more toxic than lead.
- Like lead, even minute doses accumulate in the body.
- It's neurotoxic and damages brain development in children.
- It lowers IQ in humans.
- It's carcinogenic (causes cancer).
- It's considered an "endocrine disrupter".
- It causes an iodine deficiency, resulting in impaired thyroid function.
- Numerous studies have found that the number of hip fractures among the elderly are substantially higher among those residing in communities with fluoridated water supplies.

On November 9, 2006, the American Dental Association (ADA) issued an alert advising parents to avoid using fluoridated water when reconstituting infant formula. I have yet to see any public warnings to this effect issued in communities with fluoridated water supplies. Children consuming formula made with fluoridated water receive the highest daily fluoride dosage per unit of body weight among all groups of the US population. And to make matters worse, they continue to receive and accumulate fluoride several times daily for months on end.

From this one factor alone, I have no doubt we'll continue to see testosterone and fertility rates drop for a few more decades at least. We'll also see future generations

with increased neurological problems, lower IQs, higher cancer rates, and impaired thyroid problems that will lead to even more obesity.

The Scope of the Problem

And it's not just the younger generations that will be paying the price of fluoridation. Alzheimer's disease is increasing at an alarming rate. Fluoride has been shown to enhance the bioavailability of aluminum. In simple terms, drinking fluoridated water allows more aluminum to be absorbed and cross the blood-brain barrier when it is deposited in the brain. The combination of fluoride and aluminum has been shown to cause the same changes in brain tissue found in Alzheimer's patients.

Call your local water department today and find out if your water supply is treated with fluoride. If it is, don't drink it. Don't cook with it. Fluoride compounds aren't carried away with the steam of boiling water, they're concentrated. This is why foods and drinks made with fluoridated water are also dangerous. And whatever you do, don't use it to make baby formula. These kids will have enough problems being unwary participants in all the other environmental and medical "experiments" our society is currently being subjected to.

A combination of vitamin C, vitamin E, and calcium has been shown to protect against and even reverse some of the effects of fluoride. Calcium acts as a chelating agents to help remove deposits of fluoride. Vitamins C and E have more protective effects (upon testicular and other tissues).

I would also highly recommend including turmeric (or a curcumin supplement) or curry powder in your diet on a regular basis. It has been shown to have a protective effect against the brain plaque formation associated with Alzheimer's disease.

Take care,

Dr. David Williams

If you have questions or comments for Dr. Williams, please send them to the mail or e-mail addresses listed to the right. Of course, practical and ethical constraints prevent him from answering personal medical questions by mail or e-mail, but he'll answer as many as he can in the Mailbox section of *Alternatives*. For our part, we'll do our best to direct you to his issues, reports, and products related to the subject of your interest.

Here's how you can reach us:

- For Customer Service matters such as address changes, call 800-527-3044 or write to custsvc@drdavidwilliams.com.
- If you are a licensed health professional and would like to learn how to begin reselling MHN supplements to your patients, please e-mail practitionerinquiries@davidwilliamsmail.com.
- For back issues or reports, call 800-718-8293.
- To sign a friend up for *Alternatives*, call 800-219-8591.

Visit the **Alternatives**
Subscriber Center at
drdavidwilliams.com



Your password
this month is
Service Code
88702D

Alternatives[®]

FOR THE HEALTH-CONSCIOUS INDIVIDUAL



Dr. David G. Williams

Topics in This Report

Revolutionizing Healing With the Magnetic Molecular Energizer (MME)	1
A Gel From Sweden Reverses Periodontal Disease	3
Keep Your Mouth Healthy with a Special Chewing Gum	4
A Simple Way to Build Muscle Strength	4
Three Tips To Enhance Your Exercise Program	5
The Link Between A Green Thumb and Parkinson's	6
A Papaya Extract for Parkinson's	7
The Poor Man's Chelation Therapy	7
A Better Way to Treat Urinary Tract Infections	8
A Tea of a Different Color	9
Using Fermented Foods to Fight off Infection	9
Cabbage Keeps the Gastrointestinal Tract Healthy and Helps Detoxify the Body	11
A Sweet Way to Treat Burns	11
...and Many Other Ailments	12
A Honey of an Idea for Needle Biopsies	14
Another Natural Way To Fight Infections—If You Can Stomach It	14
Padma: The Amazing Tibetan Secret of Longevity	15

Astonishing Cures From Around the World

I have spent many years traveling the world searching for natural cures and remedies for dozens of health issues, big and small alike. I share my discoveries and recommendations with you each month in *Alternatives*.

In this report, you can learn about some of my favorite findings thus far and how you can put them to use to help you maintain optimal health and well-being. Let's start with a remedy that can be used to address a wide variety of health problems—magnetic therapy.

REVOLUTIONIZING HEALING WITH THE MAGNETIC MOLECULAR ENERGIZER (MME)

About 15 years ago, Dr. Dean Bonlie of Calgary, Canada turned to magnetic therapy in an effort to rid himself of unrelenting back pain. As a result of his research, he developed a sleep pad embedded with magnets. Although there are dozens of magnetic sleep pads on the market, his is unique in several ways.

First and foremost, only the negative field's energy reaches the body. This is important since studies have suggested that using the negative field of a magnet can safely promote healing, but exposing the body to positive magnetic fields can be a different matter. Positive fields have been shown to stimulate gland and organ function and promote re-growth of cartilage, bone, and nerves, but they can also trigger a dramatic increase in the growth of cancer cells.

Based on his work to increase negative magnetic fields with sleeping pads, Dr. Bonlie began to develop his Magnetic Molecular Energizer (MME). This device has been in limited use for about six years, first at his offices in Calgary, and now in select U.S. locations.

HOW MME WORKS

The fundamentals of MME therapy are related in part to magnetic resonance imaging (MRI). MRI is based on the finding that when cell electrons are subjected to strong magnetic fields, they begin to wobble or vibrate at different frequencies. When they fall back into their ground state, they release a small amount of energy. This change in energy can be measured and converted into 3-D images from which specific tissue types can be viewed. Since different tissues resonate differently, MRI can create very clear and distinct pictures of internal body structures without actually invading body tissues. Although some of the properties related to MME therapy and an MRI scanner are similar, they have their differences:

- Unlike with an MRI scan, patients who undergo MME treatment are not required to sit completely still inside a magnetic chamber. With MME, very large (five-ton) and powerful DC, air-cooled electromagnets are placed above and below a bed. Because the magnets are above and below, there is not the claustro-

phobic feeling that many patients experience while undergoing an MRI.

- The open bed used in MME is movable, so the area of the body being treated can be placed in the focal point of the electromagnetic field. During periods of treatment, or “magnet time” as it is called, one simply lies in bed and can talk, watch television, read, or sleep. Generally, the patient feels nothing, but often they experience an immediate relief from any pain, and occasionally, some patients feel a “tingling” or “glowing” sensation, which may be related to healing activity. Since the rate of healing is increased dramatically during this period, additional nutritional supplements may also be recommended.
- The amount of time spent between the magnets will vary depending on the patient’s condition. The minimum time at one sitting is four hours and the maximum is 12 hours. Most treatments require 80 to 100 hours of exposure at a minimum, so the most convenient method is to simply sleep or rest on the bed in 10- or 12-hour segments. The cost of treatment is \$50 per hour of magnet time to cover the cost of research. For Phase III studies, there is no charge because half the individuals are only receiving a placebo.

Note: Ongoing studies of the MME are being conducted under the auspices of an Institutional Review Board as outlined in FDA regulations. Under this program, researchers are able to treat patients and accumulate data on its effectiveness. When a sufficient database has been compiled, it will be submitted to the FDA for approval. Although extensive toxicology studies have been undertaken and there are no safety issues, a significant body of actual treatment results must be accumulated before MME is approved for the treatment of a specific disease. Until formal approval is obtained, Dr. Bonlie and those using the MME are limited in what they can publish or report. The good news is that this treatment is available now. The only bad news is that until it’s officially approved, it’s doubtful the costs of the treatment will be covered by insurance. Dr. Bonlie hopes to have enough data to submit to the FDA within the next year or two.

MME PROVIDES SUCCESSFUL, FAR-REACHING RESULTS

The results obtained with MME treatment so far have been permanent. Some individuals experience complete resolution, others partial. Also, in all the cases treated with MME thus far, there have been no reports of any side effects, nor has the treatment been shown to make a condition worse. MME is non-invasive, non-toxic, and painless. Due to the strong magnetic fields MME creates, individuals with medical implants like pacemakers, cochlear (inner ear) implants, aneurysm clips in the brain, or other pieces of metal near sensitive organs may not be able to use MME.

Information is still being gathered, but Dr. Bonlie and his colleagues have experienced unprecedented success with a wide variety of problems. Many of their successes have been with diseases previously considered to be untreatable. Because of a lack of space, not interest, I cannot list every case treated with MME and the outcome. Instead I’ll list some of the conditions for which it has been successful and briefly describe a few of the more notable cases.

- **Shoulder tendonitis:** This problem kept an 18-year-old college volleyball player sidelined for six weeks, but after eight hours of MME treatment, he was pain-free and could play again.
- **Arthritis in knee:** The pain associated with this chronic condition was relieved in a 68-year-old patient who remained pain-free after only five hours of treatment.
- **Stroke:** Treatment for stroke has been very successful and requires 80 to 300 hours of treatment.
- **Multiple sclerosis:** In a group of 12 patients with multiple sclerosis, marked improvement was seen in 10 patients treated for durations of 86 to 1,190 hours. Of the two in which no improvement was seen, one had only 26 hours of treatment, and the other was experiencing an acute relapse of the problem at the time.
- **Cerebral palsy:** This disability has been particularly responsive to MME therapy. In a group of 40 treated patients, 37 have shown improvement.
- **Parkinson’s disease:** The symptoms of an initial group of 17 Parkinson’s patients improved significantly in 91 to 308 hours of treatment.

- **Alzheimer's disease:** Four of seven patients responded favorably after 100 to 259 hours of treatment.
- **Fracture:** Broken bones that would normally take months to heal have healed in a matter of days with MME therapy. A broken tibia in a 15-year-old soccer player, which would usually take four to six months to resolve, healed in 115 hours.
- **Cardiovascular disease:** Patients with heart and circulatory problems have seen remarkable results. One of the researchers is a cardiologist who reports that MME therapy can shorten the time it normally takes the heart muscle to rebuild after a heart attack from four months to only six days.
- **Herniated spinal disc:** These problems have also resolved, so far with a 100 percent success rate, usually within one week of treatment (roughly 80 hours of MME).

Other conditions that have been resolved or improved with MME therapy include Bell's palsy, Becker muscular dystrophy, fibromyalgia/chronic fatigue syndrome, headaches, head injuries, and all types of joint problems. The list is growing daily.

To the best of my knowledge, there are currently six locations in the U.S. treating patients with Dr. Bonlie's MME.

- AMRI—Laguna Niguel, CA, 949-367-0877
- AMRI—Mocksville, NC, 336-492-2874
- AMRI—Hanover, PA, 717-632-0300
- AMRI—Sterling Heights, MI, 586-254-7711
- AMRI—Toledo, OH, 419-531-6256
- AMRI—Renton, WA, 425-738-5650

Dr. Bonlie's office in Calgary can provide more details, 800-265-1119.

A GEL FROM SWEDEN REVERSES PERIODONTAL DISEASE

Periodontal or gum disease is a universal health problem today. When bacteria becomes established in gaps or pockets between a tooth and gum tissue, the tissue and the underlying bone that supports the tooth are gradually eaten away. This loosens the tooth, making it more likely that it will eventually be lost.

It has proven almost impossible to rid the mouth of all offending bacteria, especially in individuals who seem to be more susceptible genetically to its

effects. Standard treatment for periodontal pockets involves flap surgery. The gum surrounding the tooth is cut and the dentist scrapes and deep-cleans the tooth beneath the gum line. The gum tissue is then stitched to close the gap. This procedure helps get rid of the pocket, but it does nothing to strengthen the support of the tooth. In more advanced cases, dentists or periodontists actually insert artificial bone fragments into the tooth socket, hoping they will take hold and help support the tooth.

REVOLUTIONARY DENTAL CARE

Proper hygiene, cleaning, and diet are important in maintaining good teeth and minimizing gum disease, but these measures haven't been very effective in reversing damage that has already occurred. At best, they may help keep the problem in check and prevent further damage.

Biora, a biotechnology company in Malmo, Sweden, has developed a gel product that may change that. Emdogain is used to coat the root of a tooth during routine flap surgery. Modeled after a polymer found in seaweed, Emdogain contains amelogenin, a structural protein that recent studies have shown reawakens the same process that regulates the growth of teeth in infants. Within two days of application, the gel biodegrades, leaving a layer of amelogenin on the root of the tooth.

Without getting too technical, the amelogenin begins to attract cells that form a coating of cementum. Small ligaments grow into the cementum, which helps anchor the tooth to the surrounding bone. Additionally, treatment with Emdogain has been shown to stimulate the growth of both lost bone and gum tissue.

Clinical trials involving more than 300 patients have been performed in Sweden, and other studies are underway in the U.S. All the individuals treated in these studies had periodontal gaps of five millimeters or more. Within 16 months of Emdogain treatment, two-thirds of gum tissue lost had grown back, and within three years that number rose to 70 percent or more. Many patients regained all lost tissue. On the other hand, control patients or those who had adjoining teeth treated with a placebo showed no improvement, and many experienced further tissue loss.

IT'S WORTH KNOWING ABOUT

Even though Emdogain is not a product or a procedure you can use at home, I feel it is important for

Keep Your Mouth Healthy with a Special Chewing Gum...

You probably won't hear this from your dentist, but studies have shown that simply substituting the all-natural sweetener xylitol for sugar in your diet can be a crucial step in helping to prevent tooth decay or dental cavities (not to mention helping maintain a healthy heart and bones). Studies have shown that xylitol makes it hard for pathogenic bacteria to attach and "set up house" in the oral cavities. Also, the bacteria that remain attached ingest the xylitol and, over time, mutate to become less and less pathogenic.

Xylitol-sweetened gums and mints are good ways to benefit from this "friendly" sugar. But buying it in bulk will be the most cost-effective way. A good supplier is XylitolNow, www.xylitolnow.com or 619-445-2689. Note: You may get voicemail when you call. They ask that you leave a short message and the best time to call you back, including your time zone.

... and a Cuppa Joe

While I don't drink coffee, I've never been too critical of its use, as long as it's consumed in moderation. For every negative finding on coffee you can usually find a positive one, which can make the issue more confusing. Here is a case where the news is good (especially if you are a regular coffee drinker).

Researchers at the University of Pavia in Italy have found that certain compounds in coffee interfere with the bacteria *Streptococcus mutans*, which adheres to the teeth and causes cavities and tooth decay. Fortunately, the two predominant species of coffee in commercial use today—African *Coffea robusta* and South American *Coffea Arabica*—were also the most effective. Coffee brewed from roasted beans rather than *unroasted* seems to work best. (*J Agric Food Chem* 02;50(5):1225-9)

you to know about it. I haven't found any other treatment for periodontal disease that actually regenerates the growth of bone and gum tissue. Plus, Emdogain performs these feats without any adverse or allergic side effects. Based on the above studies, the Food and Drug Administration (FDA) approved the use of Emdogain in the U.S. It is already being sold in 12 other countries, including several Nordic countries, Canada, Italy, South Africa, Belgium, the Netherlands, Luxembourg, and Germany.

The periodontal community, like most groups of physicians, can be fairly slow at adopting new ideas and techniques, so don't expect to see Emdogain become accepted overnight. But if you have problems with periodontal disease, be sure to ask your dentist or periodontist about Emdogain. Rather than just keeping the problem under control with diet and hygiene, this is a simple technique to actually start reversing the disease. (If you're a periodontist or dentist and would like additional information, contact Biora's U.S. office at 800-448-8168.)

A SIMPLE WAY TO BUILD MUSCLE STRENGTH

In past issues of *Alternatives*, I've reported on the Russians' study of mechanical vibration to treat a variety of musculoskeletal problems. Their early experiments were performed on military personnel and Olympic athletes. Much of their research was unpublished, but over the last decade or so, additional studies in Europe and the U.S. have started to show that vibratory stimulation can have a profound effect not only on the musculoskeletal system, but on circulation and hormone levels as well.

Most of the research has been conducted using a mechanical vibrating plate upon which an individual stands. When the plate is adjusted to the right frequency, just standing on it will cause the body's postural muscles to contract anywhere from 30 to 50 times a second. As the body ever so slightly shifts back and forth, the muscles must contract *and* relax with each shift. In just eight to ten minutes, an individual can complete a full "workout." There are also a number of exercises that can be done on the machine. Using this plate three times a week can lead to dramatic results. (Studies have shown that using the vibrating plate more than three times a week didn't provide any additional benefits.)

Three Tips To Enhance Your Exercise Program

#1: Cultivate the Raisin Habit

At the 43rd annual meeting of the American College of Nutrition, Dr. Gene Spiller, a researcher from Los Altos, Calif., shared an excellent tip on how to reduce DNA damage. While studying their antioxidant effects, Dr. Spiller discovered that raisins, much like dried plums (prunes), have a high Oxygen Radical Absorbance Capacity (ORAC). In simple terms, they have a strong ability to neutralize free radicals created in the body.

Dr. Spiller tested the effects of giving raisins to groups of athletes competing in triathlons before competition. He found that within 15 to 30 minutes of eating raisins, antioxidant power in the bloodstream significantly increased. After 60 minutes, the antioxidants had moved from the bloodstream into various tissues of the athletes' bodies. From a practical standpoint, eating raisins before undertaking any type of strenuous activity can help prevent oxidative stress-induced DNA damage. This is the same type of damage associated with tissue aging, memory loss, and loss of brain function.

For some reason it seems that everyone inherently knows raisins are good for them. I think we just need to get into the habit of eating more of the strong antioxidant foods like raisins and prunes (excuse me...dried plums). Next time you're searching for a snack, keep in mind that just a small handful of these dried fruits can pack a very powerful punch when it comes to helping you stay healthy.

#2: Boost Your Endurance With Peppermint Oil

Recent studies suggest that peppermint oil may help improve exercise workouts. When athletes wore a peppermint-scented adhesive strip beneath their nose while using a treadmill, they reported being able to run longer and more easily. I'm not sure why peppermint oil improves workout performance, but if you have difficulty staying with your exercise program, dabbing a little peppermint essential oil on your shirt collar would be worth a try. You can find peppermint oil in your local pharmacy or health food store.

#3: The Best Food For Women To Eat After Exercise

Nutritionists at the University of Wisconsin recently uncovered some very useful data about the effects of various fats consumed after exercise. One of the benefits of working out is that the calorie-burning effect of exercise continues, sometimes for hours after the workout has ended. Nutritionists recently tested this idea and observed some surprising results.

Women who ate a meal rich in a mono-unsaturated fat, such as olive oil, 30 minutes after exercising continued to burn fat even as they rested. But women who followed their exercise with a meal rich in saturated fats (such as those from meat and dairy foods) failed to continue burning any more fat. In fact, their fat-burning capacity was the same as if they had not worked out at all. Based on these results, if you're going to go to the trouble of exercising, you'll certainly want to watch what kind of fats you eat at your next meal.

In just ten minutes, the muscles get a tremendous workout, resulting in increased strength, stability, and tone. Blood flow also increases throughout the body and joints become stronger yet more flexible. Studies have also shown that levels of the "stress hormone" cortisol decrease, while levels of other hormones, such as growth hormone and testosterone, which are important for regeneration and repair processes, actually increase. (*Eur J Appl Physiol* 00;81:449-454)

Whole-body vibration therapy, as it's now called, can be used by itself or along with weight lifting and other muscle-strengthening techniques. Vibration

training can increase muscle strength 20-30 percent more than conventional strength training while cutting training time dramatically. The vibration effectively increases the force placed on muscle fibers by three times the force of gravity.

Vibration therapy can be used by everyone—from professional athletes to frail individuals with osteoporosis. Dozens of professional football, baseball, basketball, and hockey training facilities now have this device—which is called the Power Plate. University athletic departments, martial artists, and the military have found that, in addition to

increasing strength and agility, vibration therapy can reduce sports injuries and speed rehabilitation. A representative from the Power Plate company told me Shaquille O'Neal, Clint Eastwood, Julie Andrews, Don Johnson, and many other athletes and actors have their own Power Plates.

This is one of the easiest ways I know that someone of any age or condition can increase joint mobility, muscle strength, overall circulation, bone strength and density, and overall fitness. Until recently, the Power Plate company only sold one model—the professional model described above—which was cost-prohibitive for most people (it sold for close to \$10,000).

Fortunately, there is now a model available called the Personal Power Plate (or P3) that uses the exact engines that are found in the professional version and has a “high-low” switch to provide amplitude. This means the P3 can offer the same benefits as the professional model. The P3 retails for \$3,500, plus \$300 for shipping. Power Plate North America has agreed to give *Alternatives* readers a discount, lowering the cost to \$2,999 with shipping included. (Be sure to give the reference code Dr. Williams). For more information or to place your order, call 877-877-5283 or e-mail info@powerplateusa.com.

If the price of the P3 still seems high to you, when it comes to reversing osteoporosis and increasing muscle strength and overall stability, I don't know of anything besides weight lifting that can achieve similar results. Unfortunately, weight lifting isn't an option for some. So if you compare it to the cost and consequences of a hip fracture, then the price may not seem so high.

Finally, a recent study found that using whole-body vibration therapy increased growth hormone levels by 361 percent. When you count this against the cost that many people spend each month on human growth hormone injections to stop the effects of aging, the Power Plate can be a better option.

THE LINK BETWEEN A GREEN THUMB AND PARKINSON'S

Finding the definitive cause of Parkinson's or any of the other neurological diseases that seem to be on the increase these days can be highly problematic. However, studies have shown that individuals who spray insecticides inside the home have twice the risk of developing Parkinson's when

compared to those who don't. Studies also show that in farming communities where drinking water is contaminated with these chemicals *there is* a higher rate of the disease. Pesticide levels in brain tissue are higher in victims of Parkinson's than in the general population. (*Neurology* 98;50:1346-50)

Reports from the 2003 American Chemical Society meeting in New Orleans showed that animals exposed to one of the most widely used insecticides, permethrin, developed Parkinson's-like symptoms, but stopped short of actually developing the disease. No one knows how much exposure any individual can take before the stage is set for Parkinson's or some other neurological problem. When you consider permethrin-based insecticides are found under practically every kitchen sink in the U.S., this may seem rather daunting.

Regardless of these reports, it always amazes me how careless people are with common chemicals around the house. Just because these products are “lemon scented” or “pine fresh” doesn't make them any safer. No one these days seems to worry about inhaling a little roach killer, or absorbing some flea powder or ant poison. Next time you use any of these, watch what happens to the insect. Probably over 90 percent of the poisons we use are neurological agents. The warning labels clearly explain that they work by interrupting the transmission of nerve impulses. What you'll see is an accelerated form of nerve deterioration and malfunction very similar to what happens in Parkinson's, Lou Gehrig's, Alzheimer's, and other neurological diseases.

Why the correlation isn't being made and why the public isn't being warned of these dangers is beyond me. If you want to protect yourself without giving up your love of gardening, here is what I recommend: If you must use insecticides or pesticides, wear appropriate gloves, clothing, and masks to minimize your exposure, and store the containers as far from your living space as possible.

If you're tending to your own garden, *there are many* books on organic gardening now available in bookstores and libraries. A publisher called Rodale offers specific recommendations for different types of gardens. Finally, if you use insecticides to keep insects from coming into your home, there are natural techniques you can use instead, such as *sprinkling cayenne* pepper around the edge of the house to repel ants.

A Papaya Extract for Parkinson's

A few years ago, I learned about a product that may help prevent or slow the progression of Parkinson's disease. The product is called Immun'Age FPP (Fermented Papaya Preparation), which is manufactured by a Japanese company called Osato.

Immun'Age is produced from non-genetically modified papayas that are grown in Hawaii. The papayas undergo a fermentation process and are then dried and ground into a fine powder. The final product is packed in 3-gram foil packs. Immun'Age FPP was first developed in 1969, and has been on the Japanese market for about the last 10 years. It is sold primarily as an immune booster.

Doctors and researchers familiar with Immun'Age FPP, including Dr. Luc Montagnier, president of the World Foundation for AIDS Research and Prevention, feel that the product's ability to scavenge free radicals is what makes it effective in helping treat Parkinson's disease.

Dr. Montagnier has also started testing the product in AIDS patients in Africa. So far, the studies have been on very small groups, but the results appear to be very positive. When used in combination with AIDS

drugs, it seems to stimulate immune activity. There are also indications that it helps with weight gain and improved hemoglobin levels. Larger, more extensive trials are currently being planned.

Even though more research is needed on the product, when you consider just how limited and largely unsuccessful the current treatments for Parkinson's are, getting the word out about this new discovery becomes very important. Immun'Age FPP is natural and there haven't been any reports of serious side effects. Another plus, according to people I've spoken with, is it seems to work rather quickly. You should be able to tell within a couple of weeks if it's going to help you.

Dr. Montagnier recommends taking two packets of the powder daily—one in the morning and another in the evening. For best results, the powder should be dumped under the tongue and taken on an empty stomach. Immun'Age FPP is available from Papaya Science at 888-847-3068 or www.papayascience.com. One box contains 30 packets and costs \$60. Two boxes would cover a month's supply if you follow Dr. Montagnier's recommended dose of 2 packets per day.

THE POOR MAN'S CHELATION THERAPY

There's nothing I like more than learning about inexpensive, common herbs or spices that exhibit unusual healing properties. Dr. Yoshiaki Omura with the Heart Research Foundation in New York has discovered an inexpensive, easy way to remove (or "chelate") toxic metals from the nervous system and body tissues. I call it the "poor man's chelation therapy."

At the time of the study, Dr. Omura and his colleagues used antibiotics and antiviral compounds to treat infections, but were having little long-term success. Patients' symptoms would disappear but recur within a few months. As he continued his investigation, Dr. Omura found that the patients had localized deposits of mercury, lead, aluminum, or a combination, and the infectious bacterial and viral agents continued to grow and multiply in these areas. Apparently, in the presence of these heavy metals, the antibiotics and antiviral compounds lost their ability to function.

While Dr. Omura was testing the urine of one patient, he discovered that mercury levels in the urine increased significantly after the patient consumed

Vietnamese soup that contained cilantro. Through further testing, he found that cilantro accelerated the excretion of lead and aluminum deposits from the body. When he had patients regularly consume fresh cilantro or cilantro juice and then use antibiotics or natural antivirals such as the EPA and DHA in fish oil, the infections were permanently cleared. (*Acupunct Electrother Res* 95;20(3-4):195-229)

Chelation therapy using chemicals like EDTA has long been used to remove these heavy metals, but cilantro is the only natural substance I'm aware of that has demonstrated this ability. This could be welcome news for people suffering from the ill effects of amalgam dental fillings, which contain approximately 50 percent mercury.

In fact, Dr. Omura performed a study in which three amalgam fillings were removed from an individual using all of the precautions available to prevent absorption of the mercury from the amalgam. Even with strong air and water suctioning, water rinses, and a rubber dental dam, significant amounts of mercury were later found in the individual's lungs, kidneys, endocrine organs, liver, and heart. There was no mercury in these tissues prior to the amalgam removal.

Remarkably, without the help of any chelation agents, cilantro removed the mercury in three weeks. (*Acupunct Electrother Res* 96;21(2):133–60)

DETOXIFY WITH CILANTRO AND CLAY

A number of doctors have informed me of similar successes using cilantro for detoxifying and removing heavy metals and other neurotoxins. I suggest consuming at least 1/4 cup of tightly-packed fresh cilantro stems and leaves per day during a detox.

Since cilantro may release more heavy metals than the body can remove, and to prevent any metals from being deposited in the colon, I also recommend using a form of calcium bentonite clay called Pascalite. While using the cilantro for a detox period of two weeks, take 1–2 teaspoons of Pascalite mixed with water three times a day between meals. Pascalite is available by calling 307-347-3872 or by emailing pascalite@tritel.net. For more information, you can visit the Pascalite Web site at www.pascalite.com. You can find cilantro at local health food or grocery stores.

TIPS TO KEEP IN MIND WHILE DETOXING

- Detoxing may be a simple process, but powerful forces are at work. What an individual experiences depends on his/her level of toxicity (everyone will be different). Those who are more toxic may need to start off slowly, using smaller doses of cilantro but the same amount of Pascalite.
- Signs of increased toxicity include headaches, nervousness, flu-like symptoms, or fever. Those who have taken drugs much of their lives could experience the normal effects associated with those medications or any of their side effects. These may be signs to slow down the detox. For some individuals, it is better to detox for only one week three or four times a year, rather than all at once.
- In addition to soaking up toxins and removing them from the body, Pascalite has a tendency to cleanse excess mucus and debris from the colon. Don't be alarmed if this happens; it's a good thing. But if it's too much for you, simply reduce the dosage.
- Finally, don't be surprised if you experience a permanent feeling of increased energy and well-being. After years of suffering from the effects of toxin exposure, most people are amazed at how effective the poor man's chelation therapy can be.

A BETTER WAY TO TREAT URINARY TRACT INFECTIONS

Bladder infections, or "cystitis," are commonplace in millions of females, and many women experience bladder infections every time they have sex.

E. coli can be a very nasty form of bacteria, and though it is commonly found in the human intestinal tract, where it is harmless, this bacterium causes problems in the urinary tract. In fact, *E. coli* entering the urinary tract causes 80 percent of all urinary tract infections. In almost every case, the infection begins when bacteria originating in the vagina enter the urethra and move up into the bladder. In some instances the bacteria continue to work their way up from the bladder, and eventually reach the kidneys. This can lead to infection, kidney damage, and ultimately kidney failure and the need for a transplant.

The usual prescription for treating these infections is antibiotics. However, for some women antibiotic treatment can turn simple urinary tract infections into a recurring nightmare. Under ideal circumstances, beneficial bacterial flora in the intestines and vaginal area keep harmful bacteria from getting a foothold and causing infections. Antibiotics kill all bacteria, friendly and unfriendly, which sets up the individual for the likelihood of more infections in the future. Treating an infection with D-mannose sidesteps such problems.

D-mannose is a naturally occurring, simple sugar found in fruits like cranberries and pineapples. When D-mannose is ingested, it is quickly absorbed in the upper portion of the gastrointestinal tract, but very little of the sugar is actually metabolized. Because of this, D-mannose does not affect blood sugar levels, which makes it safe for everyone, including diabetics, small children, and pregnant women.

Once D-mannose is absorbed, it is quickly filtered out of the system by the kidneys and flushed out of the body in the urine. In the process, the sugar dislodges any *E. coli* in the kidneys, bladder, and urethra. And since the bacteria can't congregate and colonize in the urinary tract, infections cannot take place.

HOW TO TAKE D-MANNOSE

D-mannose is safe for long-term use, but it rarely needs to be taken for more than a few days. The normal therapeutic dosage of *D-mannose* is 1/2 teaspoon (two grams) at a time.

For bladder and urinary tract infections, the general recommendation is 1/2 teaspoon every two to three hours. Very significant improvement or a total resolution of the problem should occur within 24 to 48 hours.

For bladder infections that occur after sex, the recommended dosage is 1/2 teaspoon one hour before and one hour after sexual relations.

Severe kidney infections can take two or three days to clear up, and in some instances require a daily maintenance dose of 1/2 teaspoon. Long-term relief requires properly re-establishing the body's natural bacterial flora in the colon and vagina. This can be done with products like yogurt, buttermilk, kefir, acidophilus, and/or lactic acid yeast wafers.

Note: D-mannose is not a cure-all, nor is it 100 percent effective, because it works only if *E. coli* is the bacteria causing an infection.

WHERE TO FIND D-MANNOSE

D-mannose is available as a powder. Being a sugar, it has a mild, sweet, inoffensive taste. It can be mixed with juice, milk, or water; but I think it is easiest to take the powder plain. It is available through the mail from Bio-Tech Pharmacal at 800-345-1199.

USING FERMENTED FOODS TO FIGHT OFF INFECTION

In Europe, where natural remedies seem to gain favor more quickly among the medical profession, fermented foods and the probiotics they contain are studied and used more readily for a variety of health problems. I hope it's only a matter of time before the trend catches on in this country. Regardless of whether your doctor ever discovers the healing and protective powers of probiotics and fermented foods, you'll do yourself an enormous favor by making them a regular part of your diet.

Protecting yourself from an infection can be challenging. Especially when you consider that you can be exposed to infections (some of which can be life-threatening) in places where you may least expect it. Take hospitals, for example. Many people think of a hospital as a place you should go to get better when you are sick. The truth is hospital-borne infections are more common than ever. And, with the ever-increasing number of antibiotic-resistant bacteria strains, contracting an infection during sur-

A Tea of a Different Color

In recent years, more information about the benefits of white tea has become available—and I'm not talking about tea with cream, but a rare variety of Chinese tea that has been shown to have an even higher concentration of antioxidants than green tea. (I still regularly consume green tea, however.)

White tea is grown on China's East coast, in the Fujian province, and is the least processed of all teas, which probably accounts for its strong antioxidant capabilities. Preliminary research from the Pauling Institute suggests that it may be effective in the prevention of cancer. Before I share the results with you, let me underscore that this research is new, and a lot more work needs to be done.

This very interesting study indicates that an extract of white tea applied topically can boost immune capabilities within the skin and protect it against sun damage. Scientists applied the extract to the skin on one buttock and left the other unprotected. After being exposed to artificial sunlight, the two patches of skin were carefully analyzed.

The white tea extract protected the Langerhans cells in the outer layer of the skin, which is the immune system's first line of defense in detecting invading germs and mutated proteins produced by cancerous cells. The scientists also discovered that DNA damage to cells was very limited where the extract was applied compared to the unprotected areas. Not only did the extract protect against the sun damage, it could also help reduce wrinkling and aging of the skin.

And since the chemical structure is similar to black and green teas, I suspect there would be a noticeable benefit to topically applying the tea as well as drinking it. The white tea I tasted was somewhat pale in color but very flavorful.

There are several mail-order sources for white tea, including:

- Generation Tea, 866-742-5668, www.generationtea.com;
- Tribute Tea, www.tributetea.com;
- Adagio Teas, www.adagio.com.

gery or a hospital stay can often mean the difference between life and death.

A VIRUS WITH POTENTIAL TO BE MORE DEADLY THAN CANCER

In fact, at the meeting of the Critical Care Congress a couple of years ago, researchers reported that sepsis is on the rise in the United States. Sepsis is technically defined as systemic inflammatory response syndrome (SIRS). In simple terms, it is an overwhelming infection of body tissue by toxin-producing organisms.

The initial infection can start anywhere in the body, but commonly begins in the urinary tract, bowel, lungs, liver, gallbladder, or lesions on the skin. For hospital patients, it also typically occurs at the site of intravenous lines, surgical wounds, surgical drains, bedsores, or skin ulcerations. The standard treatment consists of broad-spectrum intravenous antibiotic therapy. But even with the best treatment, the death rate can run as high as 60 percent.

Researchers reported that the rate of severe sepsis cases increased by 6.2 percent annually—from 635,000 cases in 1992 to 965,000 cases in 1999. Also, an increasing number of these cases (6.9 percent) now involve the failure of more than one organ. While the uninformed public may not be worried about this trend, those close to the situation feel differently.

Dr. Derek Angus, the principal investigator, said, "The incessant growth of the severe sepsis epidemic in this country ought to be cause for grave alarm. This condition has long been one of medicine's greatest foes, taking more lives each year than breast, colorectal, pancreatic, and prostate cancers combined. Mounting numbers and more complex cases will only make severe sepsis a more formidable adversary."

REDUCE YOUR RISK

Recently, a group of German physicians found that the risk of developing such an infection could be greatly reduced through the use of fiber and probiotics.

In this randomized clinical trial, the incidence of bacterial infections was observed in: a) patients given conventional nutrition (either orally or through feeding tubes); b) patients given conventional nutrition with added fiber and probiotics; and c) patients given conventional nutrition with a placebo (probiotics that had been inactivated with heat). The study involved 172 patients who underwent major

abdominal surgery or a liver transplant. Among those undergoing the abdominal surgery, 31 percent of those receiving conventional nutrition and 13 percent of those receiving the placebo developed infections. Only 4 percent of those receiving the probiotic and additional fiber developed infections.

Of the 95 patients who received liver transplants, 48 percent of those on conventional nutrition and 34 percent of those receiving the placebo developed infections. Only 13 percent of those receiving the probiotic and additional fiber developed infections. (*Z Gastroenterol* 02;40(10):869-76) (*Transplantation* 02;74(1):123-7)

Based on the above findings, I highly recommend taking a probiotic supplement, especially during times when you are at high risk for encountering infection. In addition, many probiotic strains of bacteria can be found in yogurt, sauerkraut, and other fermented foods, and they behave in the same manner as the probiotics administered in the trial cited above. Beneficial bacteria from these foods have been shown to strengthen the immune system, which can improve all types of health problems. When given a chance, these beneficial strains of bacteria can gain a dominant foothold in the gastrointestinal tract, the urinary tract, and other areas of the body and out-compete pathogenic strains of bacteria, which cause infection and wreak havoc throughout the body.

PROTECT YOURSELF NOW

I hope that someday administering probiotics to patients admitted to a hospital or scheduled for surgery will become routine. I can only imagine the number of lives that would be saved and the suffering that could be eliminated. However, until that happens, there are steps you'll have to take on your own.

If you ever have to undergo any type of surgery to the gastrointestinal tract (including dental surgery), start on a probiotic supplement (if you're not already taking one) and increase your consumption of fermented foods as quickly as possible. Even if you can't take a probiotic, eating the fermented foods is a proven, low-cost method to decrease your chance of developing an infection.

And since most hospital cuisine consists of mystery meats, lifeless vegetables, white bread, margarine, sugar-laden desserts, and chlorinated tap water, you could do yourself another favor by having a friend bring a daily serving of fermented foods to you

Cabbage Keeps the Gastrointestinal Tract Healthy and Helps Detoxify the Body

Fermented cabbage juice is loaded with several different beneficial components:

It contains numerous sulfur-based compounds which are ideal for killing all types of harmful viruses, bacteria, and other pathogens in the stomach and intestinal tract.

The juice is loaded with billions and billions of lactic acid-producing bacteria that re-establish the friendly bacterial flora in the lower bowel.

Cabbage and its juice also contain mucin-like compounds that can both protect against ulcer formation and promote the healing of existing ulcers. Straight cabbage juice from a juicer works wonders at treating ulcers. I've found that drinking a quart of the juice throughout the day seems to work best. Stick with it for at least two weeks.

Both fermented and straight cabbage juice are rich in compounds called indoles. Numerous studies have shown that indoles are detoxifying agents and can stop the formation of colon cancer.

One of the more fascinating uses of cabbage and/or cabbage juice may be in protecting the body against radiation. In the 1950s, the military found that simply eating cabbage provided a protective effect against lethal dosages of radiation.

As a general cleansing tonic, I would recommend drinking about a half a cup of fermented cabbage juice two or three times a day for one week, at least twice a year.

You'll also find that fermented cabbage juice can quickly help restore the natural bowel bacterial flora when used for a week or two following a course of antibiotics. In fact, if you regularly include either cabbage (steamed, raw, or as coleslaw) or the fermented cabbage juice in your diet, you may not need antibiotics in the first place.

If you have ulcers or any inflammation in the digestive tract (stomach, small intestine, or colon), get started on the fresh cabbage juice right away.

How to Make Fermented Cabbage Juice

To make fermented cabbage juice, all you need is either a juicer or blender and some distilled or filtered water. I generally use a blender. I start by filling the blender with cut-up chunks of raw green cabbage. To this I add distilled water until the blender is about two-thirds full. I then blend the water and cabbage for 45 seconds to a minute, and pour the mixture into a large crockery vessel. (Any glass or ceramic container will do. I wouldn't suggest using plastic, aluminum, or stainless steel.) I repeat the process a few more times until I've used an entire head of cabbage.

Next, to ferment the juice, I cover the cabbage-filled crockery vessel with plastic wrap and just let it sit out on the counter at room temperature for three days. At the end of three days, I strain the liquid through cheesecloth and discard the pulp. The now-fermented cabbage juice can be stored in a glass jar in the refrigerator. If you keep it covered, it should stay fresh for one to two weeks.

during your stay. If that's not possible, then in addition to your probiotic supplement, pack a few jars of home-prepared fermented cabbage juice to take with you. To learn how to make and use fermented cabbage juice and to find out more about the many health benefits it can provide, see the box above.

A SWEET WAY TO TREAT BURNS...

Burns are one of the most difficult problems to treat because this type of wound provides the perfect breeding and feeding grounds for many organisms. As such, burn wounds can easily become infected, and the infection often spreads rapidly into the

bloodstream, which can kill the victim. That's why if you have a burn wound, it is important to act fast and do all you can to protect yourself. Fortunately, there is an easy step you can take to do just that (while you wait for emergency medical personnel to arrive, of course): Know where your honey jar is and retrieve it. And if you don't have a honey jar, after reading this, I certainly hope you add one to your kitchen pantry, medicine cabinet, first aid kit, etc.

In past issues of *Alternatives*, I've reported on the benefits of using honey for burns and open wounds. It's nothing short of amazing. And, despite hundreds of years of success and research studies to support its use, you'd be hard pressed to find honey in any

ambulance, fire truck, emergency room, hospital, or doctor's office. That's why I recommend you keep your own supply on hand.

Several recent studies at the Miraj and General Hospital in Sangli, Maharashtra, India have shown just how effective honey can be when it is used to treat burns. One study evaluated the effects of using unheated raw, local honey on nine different pathogenic organisms found in burn wounds. One was *Pseudomonas aeruginosa*. When cultured, none of the organisms was able to survive a 30-percent concentration of the honey.

Another study found that honey was effective against 17 different strains of *Pseudomonas aeruginosa* even at concentrations as low as 10 percent. (*J Burn Care Rehabil* 02;23(6):366-70)

In another, somewhat similar study, doctors compared the effects of raw, unheated honey to numerous antibiotics on 28 different strains of pathogenic, multi-drug resistant bacteria associated with burns. Only three of the strains were inhibited at all by any of the eleven antibiotics; every single one of the 28 strains was inhibited by a 25-percent concentration of honey. Plain, simple, raw honey worked. When compared head to head with honey, eleven of the most potent antibiotic drugs available failed miserably (ampicillin, chloramphenicol, erythromycin, kanamycin, penicillin, streptomycin, tetracycline, gentamicin, amoxicillin, ciprofloxacin, norfloxacin). (*Ann Burns Fire Disaster* 03;16(2)) (*Ann Burns Fire Disaster* 01;14(1)) (*Ann Burns Fire Disaster-Pending Publication*)

Extensive studies by Dr. Subrahmanyam of India have shown that when burn patients were treated with honey, 91 percent were infection-free within seven days compared to only 7 percent using the standard silver sulfadiazine. In another group of 46 burn victims, 87 percent of honey-treated burn wounds were healed within 15 days, compared to only 7 percent of those treated with polyurethane film, and twice as many of the polyurethane film-covered wounds became infected as those treated with honey. The burn wounds of patients treated with amniotic membranes took an average of 17.5 days to heal, compared to only 9.4 days with honey. Additionally, scarring occurred in only 8 percent of the honey-treated patients, compared to 16.6 percent of those using the amniotic membrane. (*Brit J Surg* 91;78:497-498) (*Brit J Plastic Surg* 93;46(4):322-323) (*Burns* 94;20(4):331-334)

...AND MANY OTHER AILMENTS

Honey is undoubtedly one of nature's most miraculous dressings for open wounds, ulcers, and burns. In addition to its powerful antibiotic activity, honey also:

- Forms a highly viscous barrier that prevents bacterial penetration and colonization of the wound surface.
- Increases local circulation to the wound.
- Stimulates the re-growth of damaged tissue, new capillary vessels, and the growth of fibroblasts and collagen fibers, which are necessary for the formation of new connective tissue.
- Reduces swelling around the wound through its anti-inflammatory action, by drawing leaking lymph fluid and debris out of the wound, and by reducing the amount of exudate being formed.
- Allows wounds to heal more quickly since it doesn't stick to the underlying tissues and tear away newly formed tissue the way other forms of treatment do when the dressing is changed.
- Results in no or significantly less scarring compared with current conventional treatments.

Honey has to be one of the most underutilized therapeutic tools for treating burns, ulcers, and wounds. Research shows it has been used successfully to treat all types of wounds, including:

- Amputations
- Bed sores
- Leg ulcers (diabetic foot and leg ulcers, varicose ulcers, leprosy ulcers, sickle cell ulcers, etc.)
- Malignant ulcers
- Fistulas
- Cracked nipples
- Surgical wounds
- Gunshot and trauma-induced wounds, including those to the skull and abdomen
- Cuts, abrasions, and puncture wounds

Best of all, honey is so easy to use. For deeper wounds and abscesses, honey is generally used to fill the cavity after it has been cleaned. On smaller wounds and on larger ones that have been filled with honey, a top dressing is applied. This is done using approximately 1 ounce of honey on a 4-inch square dressing pad. The pad is then applied directly to the

wound. A second, dry dressing is placed on top of the first dressing and secured with adhesive tape.

Changing the dressing once daily is usually all that is required. If the wound initially produces a large amount of exudate, then more frequent changes may be necessary. Once no exudate is being produced, the honey dressing may only need to be changed once every five days to a week.

Honey is inexpensive, readily available, and one of the best-tasting burn and wound remedies I know of. It's foolish not to have a couple of bottles in your kitchen pantry and first aid kit. The gauze dressing pads will probably cost you more than the honey. (Keep in mind that some of the best and least expensive dressing pads are panty liners and sanitary napkins. Many brands now have adhesive backing, which makes them even more convenient.)

LETHAL TO MICROBES ON MULTIPLE LEVELS

There are a couple of things you need to know about the use of honey. Honey's antimicrobial activity is due to several factors. Honey is what you'd call a super-saturated sugar solution. In chemistry terms, it has what is called a very high osmolarity. When it comes into contact with microbes it "sucks" the water from their cells and destroys them. The same thing happens with sugar dressings on wounds. It draws the water from inside the bacteria cells and kills them through dehydration. Unlike sugar, however, honey has several other characteristics that are lethal to various microbes.

Honey is somewhat acidic. On the pH scale, with 0.0 being the most acidic, 7.0 being neutral, and 14.0 being the most alkaline, the pH of honey ranges from about 3.2 to 4.5. Honey's acidic nature helps destroy certain microbes. Honey also has the unique ability to produce hydrogen peroxide (H_2O_2). As I'm sure you know, hydrogen peroxide can kill pathogens on contact. Honey doesn't actually contain hydrogen peroxide but instead produces it through a chemical reaction when conditions are just right. First, the pH of the honey must rise to between 5.5 and 8.0. Second, a small amount of sodium (or salt) must be added to the mix. This is exactly what happens when honey comes into contact with human skin or a wound. The glucose or sugar molecule in honey starts to break down and produce hydrogen peroxide.

If you've ever tried to store hydrogen peroxide, you know how unstable it is and how easily it loses its

effectiveness over time. Honey remains stable for long periods, however, and retains its ability to produce bacteria-killing hydrogen peroxide upon demand. Honey also contains dozens of other antioxidants, minerals, enzymes, amino acids, fats, and compounds that aren't yet fully understood but which aid in the elimination of microbes and speed healing.

LET TASTE BE YOUR GUIDE

Generally, the darker the honey, the higher its antioxidant activity. While most people seem to prefer the taste of the lighter-colored honeys, those seem to exhibit less antibacterial activity. Manuka honey from New Zealand appears to have some of the strongest antibacterial activity. Some Manuka honeys are now rated for their Unique Manuka Factor (UMF) and are sold for medicinal purposes. Honeys with high UMFs can sell for ten times the amount of regular honey. Keep in mind, however, that the research has shown that the activity of even the worst microbes was halted with 25-percent and 30-percent solutions of regular honey, so it appears that any form of raw, unheated honey is very effective.

Although honey has an extremely long shelf life, try to get the freshest honey possible. One study suggests that, over time, honey does seem to lose some of its healing power. This is probably related not only to its age but also to how it is stored.

To minimize factors that could affect honey's healing powers, it would be best to store it in a dark, cool place. Honey does occasionally granulate. This doesn't affect the taste or its healing properties, however. The optimum temperature for granulation seems to be between 55 and 57 degrees F. If you keep it cooler or warmer than this, granulation won't be a problem.

Most people realize that the granulation or crystallization process can be reversed by heating the honey to between 140 and 160 degrees F. I don't recommend exceeding 160 degrees F, as higher temperatures and prolonged heat have been shown to adversely affect both the flavor and the antimicrobial activity of honey. Generally, placing a granulated honey jar in a bowl of hot water at the above temperatures for about 30 minutes will do the trick. I haven't seen any specific studies about the effects of microwaving granulated honey, but my gut feeling tells me it probably isn't the best way to address the problem.

A Honey of an Idea for Needle Biopsies

A study conducted in Istanbul, Turkey about five years ago confirmed another amazing health property of honey. This is one study that would never take place in the U.S., and it regrettably involves a technique that will take years if not decades to ever be implemented here.

Years ago, I reported on one of the major concerns involving the use of needle biopsies and laparoscopic cancer surgeries. If the tumor being inspected or removed is cancerous, the biopsy can spread the cancer. When the needle is pulled back through the skin after being inserted into the tumor, it can deposit cancer cells along its path. Often, a tumor forms there. In other words, the cancer cells are spread either along the entrance wound or into the bloodstream where they can reach other parts of the body.

Turkish doctors tested whether the application of honey to the entrance site would have any effect on stopping the formation of new tumors. Using 60 mice, tumor-cell injections were given to 30 of the animals using standard procedures. In the other 30, the entrance area was pre-treated with honey and then treated again with honey after the injection of the tumor cells. In the untreated group, 30 out of 30 animals developed tumors at the wound site. In the group treated with honey, only eight of the animals developed tumors. (*Arch Surg* 00;135:1414-7)

Although this was an animal study, the results are amazing, and based on all the previous research on honey's wound-healing properties and anti-bacterial properties, I don't see any downside to using the same technique on humans. If you or someone you know is planning to have either a needle biopsy or "keyhole" surgery that might involve cancerous tissue, I would strongly suggest discussing this study with your doctor and using honey to pre- and post-treat the entry wound.

If you don't already use honey, I suggest you give it a try. It's a wonderful product that fits in with a healthy lifestyle. Instead of the heated, filtered varieties found in your grocery store, try the local, raw,

unheated products generally found at health food stores, country fairs, fruit markets, etc. There are hundreds of different types, and just as many wonderful flavors to savor. If you can't find a raw honey you like locally, you may be interested in unheated, unprocessed, unfiltered, raw Tupelo tree honey from The Savannah Bee Company. A 3-ounce jar is available for \$3.50 plus shipping and handling. Call 912-234-0688 or visit www.savannahbee.com.

ANOTHER NATURAL WAY TO FIGHT INFECTIONS—IF YOU CAN STOMACH IT

Although honey can be very effective and successful fighting off infection, it does not work in all cases. In situations when the dead tissue covering a wound forms isolated pockets, the honey mixture can't come into contact with the bacteria. In this case, honey will not effectively heal the wound. Also, the dead tissue can become as much of a problem as the bacteria and other pathogens in the wound. Fortunately, there's a therapy that can help you successfully get around this problem. But I want to warn you: if you have a weak stomach, I would suggest that you not read this immediately before or after eating.

Maggot therapy, as it is called, is not something new. Maggots have been used to treat wounds for centuries in various places around the world. And it may be hard to believe, but it was also widely used in hospitals throughout the U.S. until the discovery of antibiotics in the mid-1940s. Over the last several years, maggot therapy has started to become quite acceptable in Europe, especially in Great Britain. And in about the last five years or so, some very innovative doctors in the U.S. have begun to incorporate maggots in their practice of medicine. With the growing problem of antibiotic-resistant bacteria, maggot therapy is something you definitely need to know about.

Clinical studies currently underway at the Veterans Affairs Medical Center and the University of California have proven that maggot therapy is far more efficient at cleaning infected and gangrenous wounds than any other known non-surgical treatment. Maggot-treated wounds heal several times more quickly, and reduce the risk of losing infected limbs.

Specially bred and sterilized maggots are placed on a wound, which is then covered with a light nylon net to prevent *them* from escaping. As they move over the surface of the wound they secrete proteolytic

enzymes that dissolve dead tissue into a liquid residue, which they then ingest. As an added bonus, any bacteria in the wound is also eaten by the maggots and later destroyed in their gut. In addition to their secretion of proteolytic enzymes, maggots secrete numerous other compounds that kill and/or inhibit the growth of many forms of pathogenic bacteria, including many of the antibiotic-resistant strains.

THE BOTTOM LINE: IT WORKS

Doctors in Europe have reported that after weeks of unsuccessful treatment, five patients with antibiotic-resistant infections were treated with maggots. After only 48 hours, all of their lesions were bacteria-free and healing well.

Maggot therapy costs about half as much as conventional wound therapy, works far faster, and can wipe out antibiotic-resistant bacteria in a matter of just hours. Not only can it save limbs, it can save lives as well.

While maggot therapy might seem like an antiquated form of treatment, insurance companies here in the U.S. have already recognized its importance, and now reimburse for the procedure. But finding a doctor knowledgeable about the therapy and willing to perform it is a different matter.

Dr. Ronald Sherman with the University of California has set up an information clearing house and research center to help study and promote the use of maggots in this country. It's called the Maggot Therapy Project. The center provides the names and contact information of medical professionals who use maggot therapy in the U.S. Also, licensed healthcare providers can purchase medicinal maggots directly from their laboratory.

To produce medicinal maggots, eggs are collected from adult blowflies (*Phaenicia sericata*) and then sterilized and allowed to hatch on fresh liver. A batch typically contains between 500 and 1,000 disinfected maggots.

In addition, you'll need a few sterile nylon wound dressings, which you can also purchase with the maggots. A very detailed sheet of instructions on exactly how to store and use the maggots comes with each order. The procedure is very simple and easy to follow.

Dr. Sherman can be contacted at: Ronald A. Sherman, MD, MSc, DTM&H, Dept. of Pathology,

Room D-440, Medical Sciences Building, ZOT Code 4800, University of California, Irvine, CA 92697-4800. He also has a Web site at www.ucihs.uci.edu/com/pathology/sherman/home_pg.htm.

PADMA: THE AMAZING TIBETAN SECRET OF LONGEVITY

In the field of health, there has never been a shortage of opinions or advice. The difficulty has always been to determine exactly what products and techniques are truly legitimate. Every month or so, we hear about some new miracle supplement, product, or procedure that cures this or that problem. Sometimes it's hard not to get caught up in all the excitement and frenzy. Unfortunately, as you well know, most of these "breakthroughs" turn out to be only marginally helpful at best. Oftentimes, they're totally worthless. Once the promotional hype subsides, these products seem to gradually fade into the background. There are dozens of examples, including products like colloidal minerals, Noni juice, and many products sold through multi-level marketing organizations.

At the other extreme, there are a few products and techniques that have withstood the test of time and continue to be used thousands of years after their discovery. Maggot therapy and acupuncture are two such techniques that come to mind. Ginseng is a product in the same category. These have been used for hundreds, if not thousands, of years with continued success. Such products or techniques often go unnoticed in Western societies, and yet play a crucial role in societies still practicing their own brand of traditional medicine. This has been the case with another product, called Padma 28, which I first wrote about several years ago.

The formula for Padma 28 comes directly from Tibetan medicine, a system that history shows began over 3,500 years ago. Padma was derived from an ancient Tibetan formula known as Gabur, or the "camphor formula." Over the last couple of decades, research from both Europe and Israel continues to suggest that Padma is extremely helpful in increasing longevity and improving health. Its primary action is the improvement of circulation, which has numerous benefits throughout the body—including increasing pain-free walking distance in those with poor circulation in the extremities, relieving angina pain, and improving mental function.

PADMA BASIC

Padma, Inc., of Switzerland has been making the formula under the name Padma 28 for the last 30 years. It is called "28" because it was based on the 28th formula in an ancient textbook of Tibetan medicine. Just recently, the product Padma Basic from Padma, Inc., has become available in the U.S. It is the same product, except for very small amounts of one ingredient, aconite, which Padma 28 contains. There have been some questions as to the safety of aconite, so it isn't allowed in the U.S. product. Tests have shown that removing the aconite doesn't appreciably change the beneficial effects of the product.

Padma Basic contains the following herbs:

- Allspice (*Pimenta dioica*)
 - Bengal Quince (*Aegle marmelos*)
 - Calendula (*Calendula officinalis*)
 - Cardamom (*Elettaria cardamomum*)
 - Clove (*Syzygium aromaticum*)
 - Columbine (*Aquilegia vulgaris*)
 - Costus (*Saussurea lappa*)
 - English Plantain (*Plantago spp.*)
 - Gingerlily (*Hedychium spicatum*)
 - Golden cinquefoil (*Potentilla aurea*)
 - Heartleaved Sida (*Sida cordifolia*)
 - Iceland moss (*Cetraria islandica*)
 - Knotgrass (*Polygonum aviculare*)
 - Lettuce (*Lactuca sativa*)
 - Licorice (*Glycyrrhiza glabra*)
 - Margosa (*Azadirachta indica*)
 - Red Sandalwood (*Pterocarpus sandalinus*)
 - Tropical Almond (*Terminalia chebula*)
 - Valerian (*Valeriana officinalis*)
- Natural Camphor
 - Calcium Sulfate

These herbs are sourced from around the world and rigorously tested throughout the production process to ensure product effectiveness. We recognize only four tastes: sweet, sour, salty, and bitter. In addition to our four, Tibetan medicine includes astringent and hot. The herbs are tested for identity, purity, and potency by chemical fingerprinting using high-pressure liquid chromatography (HPLC), gas chromatography (GC), and thin layer chromatography (TLC). Test batches of each herb are also sampled by trained tasters to check for astringency.

Padma is packaged to have a five-year shelf life and is free of pesticides and contaminants. Research has repeatedly shown that it has no side effects or interactions with other medications. (It is still recommended, however, that it be taken 30 minutes before meals, and that other medications be taken at another time.)

Dosages vary depending on age and condition. For adults, 6 tablets a day (2 tablets taken three times a day before meals) are recommended during the treatment phase of a problem. Once the problem has been resolved over a matter of weeks or months, you can generally taper back to a maintenance dose of 1 or 2 tablets a day. For children over three years, try 1 tablet three times a day. Those under three should be given 1/2 tablet three times a day.

You can visit a health care provider for help purchasing Padma Basic or you can order it from EcoNugenics at 800-308-5518 or www.econugenics.com.



Alternatives®

FOR THE HEALTH-CONSCIOUS INDIVIDUAL



Dr. David G. Williams

Topics in This Report

An Anti-aging Hint: Protect Your Eyesight and Skin with Avocado and Walnuts.....	1
The Link Between Sugar, Obesity, and Diabetes.....	2
A Strict Training Regimen for Obesity.....	4
Beware of Sugar Substitutes, too: Especially This Hidden Ingredient.....	6
Hospitals and Day Care Providers: More Life-Threatening than Terrorists.....	7
News About Tea Just Keeps Getting Better.....	8
Great News for Chocoholics.....	9
How You Sleep Can Affect Your Health.....	9
Spike It with Cinnamon.....	10
Natural Aid for Arthritis Pain... 11	
...and Nausea.....	11
Nausea Relief Through Deep Breathing.....	12
Fairly Good Food From Fish Farms.....	12
An Easy Way to Assess Your Risk for Heart Disease.....	13
Risk Levels for Men Based on Resting Heart Rates.....	14
Research Suggests NSAIDs May Increase Risk of Congestive Heart Failure.....	15
A Healthy Tip for Aspirin Users.....	16
A Vital Dietary Component We Just Don't Get Enough Of.....	16
Build Stronger Bones With This Fruity Snack.....	18
Protect Yourself From Cold and Flu With Eucalyptus Oil.....	18
A Pain Remedy For Pets.....	19

The Greatest Hits Collection

In the following pages, you will read excerpts from some of the most popular articles that have ever been published in *Alternatives*. As you will notice, they cover a wide variety of topics ranging from anti-aging, diabetes, weight management, and sleep quality to protecting yourself from infection and other illness, relieving nausea, promoting optimal heart and bone health, and even taking care of your pet.

I hope you enjoy reading these articles, and I am confident you will find them useful in your quest for optimal health and well-being.

AN ANTI-AGING HINT: PROTECT YOUR EYESIGHT AND SKIN WITH AVOCADO AND WALNUTS

A few years ago, research from Monash University in Victoria, Australia, revealed that what you eat can directly influence the health of your skin. Skin damage in individuals living in Melbourne, Australia was compared to that of individuals living in rural Greece and in Sweden. It was discovered that the type of foods they consumed influenced the amount of wrinkling and damage to sun-exposed skin in older individuals from different ethnic backgrounds.

Far less skin damage and wrinkling was found in those individuals who had a higher dietary intake of the following foods: vegetables, olive oil,

fish, legumes, eggs, yogurt, nuts, olives, cherries, melons, dried fruits/prunes, apples/pears, multigrain bread, jam, tea, and water.

Foods that were associated with more wrinkling and skin damage included: full-fat milk, red meat, potatoes, margarine, butter, soft drinks/cordials, cakes, pastries, and sugar products. (*J Am Coll Nutr* 01;20(1):71-80)

If everyone seems to be looking older these days, it may be that potatoes, in the form of french fries, are the number one vegetable consumed in the U.S. And, to help accelerate the aging process, more often than not the french fries are part of a meal which consists of hamburger meat on buns made from white flour. Then the whole mess is washed down with some sugar-laden soda, followed by dessert.

Although the results of this research study probably won't get disseminated very widely, it's the type of information that might help change a lot of people's diets. Most people get serious about their diet only when they experience the symptoms of heart disease. But if they knew that they could avoid wrinkles and slow the aging process, they might be more inclined to make changes in their diet.

For years, we've been told to reduce the saturated fat in our diet. Unfortunately, the reduction in satu-

rated fat has been quickly replaced by either refined carbohydrates or trans fatty acids. And both of these increase the risk of heart disease (by lowering the beneficial form of cholesterol, HDL), increase inflammation in the body, and lead to premature wrinkling and aging.

If you go to the trouble of cleaning up your diet by reducing saturated fats and the other items listed above, don't replace them with more refined carbohydrates or sugar. Instead, add more fruits and vegetables—and include foods rich in the monounsaturated fats that we now know reduce the risk of cancer and heart disease, reduce inflammation, and, as the above study indicates, prevent skin wrinkling and slow the aging process. Olive oil, olives, avocados, and walnuts are all great sources of monounsaturated oils.

As added incentive: a few ounces of walnuts each day can improve energy levels and significantly reduce heart disease without causing any additional weight gain. The same is true with avocados. In fact, some research indicates that avocados are the richest fruit source of vitamin E, followed by kiwi, nectarines, grapes, and peaches. And hardly anyone ever mentions that avocados are also the best fruit source of lutein, the compound that protects against cataract formation and macular degeneration. (*Nut Week 01;31(24):7*)

Armed with this new information, I urge you to start making the dietary changes that will help prevent any additional premature wrinkling and aging of your skin. Those same dietary changes will help protect you from heart disease, and that's an additional benefit worth having.

THE LINK BETWEEN SUGAR, OBESITY, AND DIABETES

Longtime readers of *Alternatives* know that I think sugar has become one of the primary factors associated with the declining health of our society. Man has historically been able to adapt to his changing sources of food. In the beginning, he was basically a gatherer and later began hunting, then farming. The food supply changed from nuts, berries, and roots to animals and fish, then later to grains. It took thousands of years to adapt to these changes.

Sugar, which has become one of the major components in our diet, has only been in wide use for the last couple of hundred years. Prior to this time,

sugar was a treasured and expensive commodity. Throughout the 1700s, the yearly consumption of sugar was about one pound per person. In the 1800s, it had increased to just over 16 pounds, and in the 1900s it began to skyrocket.

In the last 50 to 60 years, its use has become even more widespread in our diets. Our bodies aren't equipped to handle the quantity of sugar we now consume, nor have they had time to adapt to these levels. That ability would probably take thousands of years to develop. Based on the unbelievable number of individuals suffering from diabetes and heart disease, it should be obvious to everyone that the pancreas is not able to handle the constant high blood-sugar levels from our current diet.

THE INVISIBLE EPIDEMIC

I'll try not to get into too much detail here, but it's vitally important that you understand what's happening. People are dropping like flies around us from diabetes and heart disease, and for some reason no one seems to recognize and/or report the connection between these deaths and sugar.

When you consume sugar or a meal heavy in high-glycemic foods it causes a rise in your blood sugar. Examples of high-glycemic foods include: pastas, colas, refined grains, white-flour products, alcohol, corn, skinless potatoes, white rice, etc. Most bread is also considered high-glycemic, but the rate at which bread raises blood sugar levels can be lowered if you toast the bread.

To keep your blood sugar from getting too high, your pancreas releases insulin. Insulin helps move blood sugar (glucose) out of the bloodstream and into each of the cells in the body where it can be used as fuel. Insulin also helps to suppress your appetite by triggering signals that you're satisfied and full and stimulates production of the hormone leptin. Leptin is produced by your fat cells, and not only does it limit fat storage, but it also helps increase your metabolic rate to burn excess fat.

Under ideal circumstances, your pancreas will release the exact amount of insulin it takes to bring your blood sugar down into the normal range. Unfortunately, if you were born with a weak pancreas, or if you abuse your pancreas through a life-

time of eating sweets, you can develop hyperinsulinism and insulin resistance.

Hyperinsulinism is a very common occurrence. It happens when the pancreas overreacts to an increase in blood sugar levels and secretes too much insulin. This creates a couple of immediate problems. First, it causes the blood sugar to drop down further than normal, creating hypoglycemia, or low blood sugar. Second, this blood sugar condition triggers fatigue, depression, headaches, and the craving (addiction) for more sugar to bring the blood sugar up to normal. Over the long term, your body's cells can develop what is called insulin resistance. In effect, they become less sensitive to insulin, and it takes more insulin for them to "open up" and allow glucose to enter. This makes matters worse by forcing the pancreas to produce and secrete even more insulin. (*Vnitr Lek* 99;45(10):614-7)

IT'S ALL IN THE PANCREAS

Among conventional circles, the idea that obesity causes diabetes has been accepted for a long time. It appears, however, that a failure of the pancreas to properly control insulin may be one of the primary causes of obesity. And the pancreas is beginning to fail at a rate never seen before in history. There's a distinct link between the increase in our sugar consumption and pancreatic failure.

Obviously, some people are born with a stronger pancreas than others. This helps explain why some individuals are able to eat tons of sweets and stay skinny all their life. And then there are those individuals who start out that way, but once their pancreas finally fails they start to put on weight like never before. Those with a weak pancreas from birth end up fighting a weight problem all their life.

Unfortunately, most doctors haven't made the connection between obesity, heart disease, and the inability to properly handle blood sugar. In fact, most blood tests still show that a fasting blood sugar level is anything below 110 mg/dL. An individual with a reading between 110 mg/dL and 125 mg/dL is considered "pre-diabetic," and someone with a reading above 125 mg/dL is considered diabetic.

However, a more recent study has shown that those in the "pre-diabetic" category already have a 300 percent increase in the risk of heart disease when

compared to those with a reading of less than 79 mg/dL. (*Am J Cardiology* 02(1):89(5):596-9)

To be on the safe side, your fasting blood sugar should be no higher than 90 mg/dL, and around 80 mg/dL would be even better. If it's any higher, it should sound an alarm. It's much easier to correct the problem in the early stages. Unfortunately, for now it appears that as a society we're taking the wrong approach to this problem.

FAKE SWEETS CREATE REAL PROBLEMS

To make matters worse, rather than reducing simple carbohydrates in our diets and removing sugar from our foods, we've just replaced them with artificial sweeteners. Even though we still don't understand the long-term effects of introducing these artificial compounds into the body, the reactions they trigger may be even more dangerous than those of sugar. In our infinite wisdom, we are again trying to trick the body, basically so we can have our cake and eat it too. In reality, however, what we're doing is confusing another of our body's natural instincts and disrupting its ability to adapt.

Artificial sweeteners certainly give the sensation of sweetness and, in turn, trick the body into believing it is getting ready to digest a carbohydrate. Since the most popular artificial sweetener, aspartame, is a chemical combination of two amino acids, the carbohydrate never comes. One or both of two things might happen. First, if the aspartame-containing food or drink (such as a cola) is taken with a food that is high in carbohydrates (such as pasta or pizza), the pancreas might release far too much insulin, triggering all the problems I've discussed (hyperinsulinism, insulin resistance, etc.). Second, the next time your body encounters a real carbohydrate, it might compensate for its prior absorption "failure" by becoming more efficient at absorbing the carbohydrate, which would also create the need for more insulin. (For more on the dangers associated with another popular sugar substitute see the box on page 6.)

When it comes to treatment, as usual, there's more attention being placed on the symptoms of the problem than the problem itself. We've recently seen several new diabetes drugs come to market, and more will be on the way. The pharmaceutical industry is feverishly working on drugs that can

manipulate levels of hormones associated with fat storage in the body.

First, we heard that manipulating leptin levels would allow us to eat anything we wanted and still lose weight. Now the newly-discovered hormone that has to be conquered is called ghrelin. Apparently, as long as the public is willing to pay to be guinea pigs, the pharmaceutical companies will continue to come up with the experiments. (*NEJM* 02;346:1623-1630) A better way to address the issue is to eliminate the roots of the problem, including a recent rise in obesity.

FIFTY WAYS TO LEAVE YOUR LOVE HANDLES

Along with the recent rise in obesity, America has become obsessed with dieting. Every day I get asked about one diet or another. I never knew there were so many different diets. Besides those like the Atkins, Pritikin, and Zone diets, there's also the Beverly Hills diet, the Airline Stewardess's diet, the cabbage diet, the sweet potato diet, and a host of others. For the record, you can generally lose weight on almost any diet. The real problem is always trying to keep the weight off. Statistics show that, of those who lose any substantial amount of weight, only about 3 to 5 percent are able to keep the weight off for at least a year. The primary reason nobody can keep the weight off is because low-calorie weight-loss diets go against your body's natural instincts. Initially they "trick" your body into losing weight, but this can go on only so long before your body's natural survival instincts kick in.

In the 1980s, a French doctor, Dr. Ruasse, published research showing how following a series of low-calorie diets for several years (known as yo-yo dieting) actually leads to obesity. Additional research conducted at the University of Pennsylvania supports Dr. Ruasse's early work, and explains why someone who starts dieting to lose 10 or 15 pounds can eventually end up 20 or 30 pounds overweight several years down the road. (*Physiol Behav* 86:38(4):459-64) (*Int J Eat Disord* 95:18(1):49-57) (*JAMA* 88;260(21):3132)

A STRICT TRAINING REGIMEN FOR OBESITY

Once you understand how your body works, you'll see exactly how these low-calorie diets lead to long-term problems. For example, let's say that you are overweight and your diet consists of 2,500

calories a day. To lose weight, you drop your calories down to 2,000 calories a day. Since your body is used to getting and using 2,500 calories each day, there's a deficit of 500 calories. At first, your body will tap into its fat reserves to find the additional 500 calories it has become accustomed to, and you will begin to lose both fat and weight. This will continue for a while, but then you will notice that you are no longer losing weight. The weight loss stops because the survival instincts of your body begin to kick in.

In an effort to survive, your body has the ability to constantly adapt to your changing environment. In this particular case, when your caloric intake drops, your body instinctively begins to gradually slow down your metabolism. It must do this. Otherwise, if you continued to burn more calories than you took in, you would eventually just waste away. Once your body has adjusted the amount of calories you burn each day to equal the lower amount of calories in your diet, any weight loss will stop. To lose more weight, you must either cut your caloric intake further or increase the number of calories you're burning. And if you stop the diet or exercise, you will actually regain more weight than you originally lost.

The researchers mentioned above discovered that each cycle of dieting consists of three phases: weight loss, weight stabilization, and then regaining of the weight. The most amazing finding from their research, however, was that after the first diet cycle the initial amount of weight lost at the beginning of each subsequent diet continued to decrease and the amount of weight regained at the end of the diet increased. In other words, with each diet, the body tends to lose less weight during and regain more weight after the diet. This explains how some individuals who have been on low-calorie diets all their lives have gotten to the point where they can practically starve themselves and still not lose a pound of weight. Instead of tricking the body into losing weight, they have turned on and fine-tuned their body's survival instincts.

THE BODY'S INSTINCTIVE FAT RATCHET

When you're faced with starvation, your body will instinctively do two things. First, it will lower your metabolic rate to conserve energy reserves. Second, it will begin to store any additional calories it receives in the form of fat to help build up energy reserves

for the future. To store this extra fat, the body not only increases the size of existing fat cells, but also increases the number of fat cells in the body. Every time you reduce your caloric intake below normal levels, this survival mechanism is triggered and it becomes more and more efficient. Every time your body senses that you're going into a period of starvation (another low-calorie diet) it becomes more efficient at lowering your metabolic rate to stop weight loss, and more efficient at storing additional reserves of fat as soon as they become available.

Individuals who are habitual dieters generally have a chronically depressed metabolic rate. They suffer from a constant lack of energy and are very often depressed. This yo-yo dieting, or weight cycling, as it is called, is also associated with life dissatisfaction, psychological problems, and binge eating. The majority of the research in this area also indicates that this behavior is linked to heart disease and earlier-than-normal deaths. (*Arch Intern Med* 94;154(12):1325-30)

Habitual dieters will also associate with the fact that they gain weight almost instantly if they deviate in the least bit from a diet. Their body has become so efficient at storing fat that it will do so quickly whenever the opportunity arises. This is why it is so important not to skip meals, which can trigger the starvation instinct. It's also one of the reasons we are all better off eating several (five or six) small meals throughout the day rather than starving most of the day and eating only one meal. A particularly good example of what happens can be seen in dogs.

TURNING A CHOW HOUND INTO A PETITE POOCH

Most people I know have been taught to feed their dogs once or twice a day. And in the majority of cases nowadays, dogs easily become overweight. I've always found it difficult to determine exactly how much to feed a dog. When they're fed once or twice a day, they always seem to be starving and will eat everything you give them. This is probably because a dog's survival instinct is very similar to man's. If it feels like each meal may be its last, then it is going to eat more food and store more reserves as fat. Thanks to this method of feeding, we now have a whole range of low-fat dog foods on the market. (A lack of exercise is obviously another contributing factor.)

Rather than feeding a low-fat dog food, it often works best to give the dog access to as much food as it wants. By keeping a full bowl of quality dry food out twenty-four hours a day, most dogs will very quickly begin to realize that they don't have to eat like every meal is going to be their last. Most will very quickly develop a pattern of eating only when hungry, and will adapt their intake to their activities.

By "grazing," or eating small meals and/or healthy snacks (raw vegetables) five or six times throughout the day, we can also condition our bodies to the fact that we're not starving, either. Whether you need to lose weight or not, eating several small meals throughout the day is a habit that you need to implement. The benefits of this habit are many. In fact, I'm convinced that in addition to helping maintain a proper weight, it will also help you even out your insulin level through the day, slow the aging process, and lessen your chances of developing heart disease and diabetes.

If you want to lose or control your weight, reduce your risk of dying or suffering from diabetes or heart disease, slow down the aging process, and/or prevent dozens of other problems, you need to control your insulin levels. To do this you must:

1. Restrict or eliminate sugars, artificial sweeteners, and high glycemic foods from your diet. (The glycemic index is a rating system that compares the way various foods influence blood sugar levels. The scale goes from 0 to 100. Glucose is rated at 100, and the closer to 100 a food is rated, the more it affects blood sugar levels. You can purchase *The Complete Guide to Fat-Storing Carbohydrates*, a book that contains a list of 1,000 foods categorized by glycemic rating, from The Glycemic Research Institute by calling 727-894-0042. For more information, visit www.glycemic.com.)
2. Begin to eat smaller and more frequent snacks/meals.
3. Exercise regularly.

Although I haven't covered it in this article, dozens of studies have found that regular exercise has been shown to lower and help stabilize insulin levels. Besides diet, it is probably the safest and most effective natural method you can use to lower insulin levels.

Beware of Sugar Substitutes, Too: Especially This Hidden Ingredient

Fructose, as you may know, is a form of sugar that occurs naturally in fruit and honey, and has a low glycemic index. Based on these characteristics, it has often been assumed to be a good substitute for sucrose, or white sugar. It's not.

Don't get me wrong: There's absolutely nothing wrong with eating fruit and moderate amounts of honey. While these foods get their natural sweetness from fructose, they also contain an abundance of minerals, antioxidants, and/or fiber and other beneficial compounds. Fructose by itself, however, is a major problem.

In just the last 25 to 30 years, fructose in the form of high-fructose corn syrup (HFCS) has become one of the primary sweeteners in our food supply. Corn syrup alone is composed mainly of glucose. HFCS is a concentrated product produced by converting much of the glucose to fructose. Food companies like it because it is less expensive yet sweeter than cane sugar. (This is what allows them to "supersize" those soft drinks for nearly the same cost as a smaller drink.)

Undoubtedly, the public's major source of HFCS comes from soft drinks, but it's hard to find any sweetened food product that doesn't now contain HFCS. In the 1970s, per capita consumption of HFCS was less than one pound per year; it now exceeds 60 pounds per year. Never in history have humans consumed as much fructose, and never has there been such a widespread problem with obesity and diabetes.

Fructose acts differently from other carbohydrates because it doesn't trigger the release of insulin. As a result, fructose isn't moved to muscle cells for energy, leptin production isn't stimulated, and your metabolism doesn't increase. Moreover, with fructose you never experience the accompanying reduction in appetite or feeling that you're full. These facts have led many researchers to conclude that HFCS is the underlying cause of the unprecedented obesity problem we're experiencing today.

While enjoying a soda has been characterized by Madison Avenue-types as an innocent, wholesome, all-American habit, the end result is proving otherwise. HFCS-sweetened sodas are not only fueling our obesity problem, they will also subject thousands of unsuspecting teenagers to diabetes and future renal dialysis.

If you eat any processed foods—and we all do—it's practically impossible to avoid all HFCS-sweetened products. You can avoid sodas, though. And it would be wise to check food labels and avoid HFCS when possible, particularly when it is one of the main ingredients. If you want to lose weight or control your weight and also lower your risk of diabetes, you need to walk away from HFCS products.

HFCS May Also Increase Risk for Alzheimer's and Other Health Problems

Consuming fructose has another serious downside. A couple of years ago, I wrote about the process called glycation, where sugar combines with various amino acids in your body to create what are referred to as advanced glycation endproducts (AGEs). AGEs are thought to be permanent, and they accumulate throughout the body, accelerating the aging process and causing all kinds of problems. AGEs result in cataracts, blockages in blood vessels, kidney problems, and possibly even Alzheimer's disease.

High levels of fructose contribute to increased levels of glycation in the body. If the general public ever understands what high fructose is doing to their bodies, health manufacturers may be forced to stop using it. As with many of these experiments on our health, however, a couple of generations will probably have to suffer from a few new unexplained "syndromes" before medical authorities finally figure out what's happening. You can do yourself a favor by not following the crowd on this one and eliminating the sweets now.

HOSPITALS AND DAY CARE PROVIDERS: MORE LIFE-THREATENING THAN TERRORISTS

Since the events of September 11, 2001, I continue to receive calls and letters with questions and concerns about what to do in the face of different terrorist events. In no way do I want to downplay these concerns, but the reality of the current situation is that there are far more mundane health issues that need to be addressed.

Currently, one out of every 20 patients gets an infection during a hospital stay. That works out to approximately 2 million patients a year, and of those, 90,000 die as a result of the infection. Reports also indicate that close to 4 million cases of infectious diseases are contracted from day care facilities each year. It's unknown how many of these result in death.

These atrocities alone should cause widespread panic in the streets. Granted, infections will always spread in hospitals. And infections are bound to spread in schools, day care facilities, and other locations where individuals are confined and in close contact. But we know that as many as three-quarters of these infections are easily preventable.

The majority of these infections are passed from one infected person to another by caregivers. In day care facilities diapers are changed, runny noses are wiped, hands are held, heads are patted, and the pathogens get passed from child to child. In hospitals research has proven time and time again that doctors and nurses spread infection from patient to patient.

What about hygiene? It's practically non-existent in most day care facilities, and data from the Centers for Disease Control indicate that physicians still wash their hands only 48 percent of the time between patients. With nurses, hand washing is even less frequent. When you're dealing with infectious diseases, those numbers are absolutely ridiculous. When you have 90,000 deaths each year, and as many as three-fourths of those could have been prevented, there's no excuse for poor hygiene. We now know that bacteria can flourish under rings and other jewelry for months, and that artificial and long fingernails are fertile breeding ground for pathogens, and yet these items are still allowed in surgical theaters and hospital treatment rooms. (*Guideline for Hand Hygiene in*

Health Care Settings, Boyce J., Pittet D., National Center for Infectious Diseases)

Hospitals, physicians, and nurses know the problem exists, and they have dozens of excuses: There are not enough sinks, there's too much cost cutting, HMOs make doctors see too many patients in too little time, etc., etc. The truth of the matter is that no one is being held accountable. The Centers for Disease Control keeps records on the infection rates of different hospitals, but they refuse to release the figures because they know it would drive business away from hospitals with high infection rates...duh.

KEEP YOUR DISTANCE. . . AND YOUR WITS ABOUT YOU

Until the CDC is forced to release its data, there's not much you can do, except stay out of hospitals. If you do have to go, make sure you keep a hospital-approved, alcohol-rub hand cleaner next to your bed, and make every doctor, nurse, and caregiver clean their hands when they enter your room. Have them do this before they touch you or anything in the room.

Before you submit to surgery, ask your surgeon for his or her infection rate. They know it. And request that only essential staff be present during any operation. You don't want medical students or others milling around during your operation. It only increases your risk of developing an infection.

Last but not least, get out of the hospital as soon as possible. They have become some of the most dangerous places in the world you can be. In addition to the danger of contracting infections during a hospital stay, you should also be concerned about the number of deaths associated with prescription medications.

HEALTH CARE THAT KILLS

The most recent figures on these deaths are a little more than six years old, and the problem has undoubtedly gotten worse since then. Your chance of experiencing a serious adverse drug reaction is very high. The University of Toronto did a study and found that roughly 2,216,000 patients in U.S. hospitals per year experienced a serious adverse drug reaction. Of these, 106,000 died each year from an adverse drug reaction during their hospital stay. Based on these figures, adverse drug reactions

News About Tea Just Keeps Getting Better

For years, Richard Anderson, with the U.S. Department of Agriculture, has been studying various food products and their relationship to insulin. Most recently, he discovered that drinking a cup of tea can enhance the activity of available insulin by 15-fold. A simple cup of tea could be the perfect "pick-me-up" for diabetics, though the compounds that enhance insulin activity would benefit all of us, not just diabetics.

Compounds in tea called polyphenols have been shown to have beneficial antioxidant properties, as well as antibacterial, antifungal, antiviral, and anticancer effects. But it's another compound in tea—epigallocatechin gallate, or EGCG—that appears to provide the insulin-enhancing boost. The more efficient insulin is, the less insulin your pancreas has to produce. Other benefits of EGCG include its anticancer and fat-burning properties.

Anderson found, however, that herbal tea doesn't provide this insulin-enhancing effect. Only the true teas—green, black, and oolong—were shown to work. You can find these in any grocery store. You should also know that adding milk, non-dairy creamer, and soy milk lessened the insulin-enhancing effect of the EGCG. Adding just 5 grams (less than an ounce) of 2-percent milk dropped the activity by one-third, and when milk was mixed 50/50 with the tea, the positive effect was reduced by 90 percent. There was no diminished effect, however, when lemon juice was added to the tea. (*J Agric Food Chem* 02;50(24):7182-6)

are now the fourth leading cause of death in this country. (*JAMA* 98;279(15):1200-5)

To put this in perspective, the number of people dying in U.S. hospitals every month from adverse drug reactions would be the same as having three World Trade Center collapses each and every month.

Strangely, there's been no outcry or demand for change from either the public or government officials. If anything, the pharmaceutical companies and their supporters continue to gather more support for their efforts to increase drug consumption in this country. It's a huge industry, and one of the only industries in the U.S. that continues to show double-digit increases in profits. Most politicians certainly don't want to attack the industry, and the general public has been brainwashed into believing it's now a blessing to have a "pill for every ill."

TO THINE OWN SELF BE TRUE

Learning how to protect and preserve your own health through natural means has never been more crucial. Entrusting your health to the pharmaceutical industry, conventional medicine, or hospital staff is fraught with serious danger. The above study on adverse drug reactions looked only at outcomes from properly prescribed medications, but mistakes also account for many harmful incidents. When that happens, most of the affected patients and families never learn the true story. Nurses, doctors, and hospital administrators routinely observe an unwritten code of silence. Don't expect them to risk their careers by admitting they made a mistake.

If at all possible, it would be wise to have someone with you during any hospital stay in which your ability to think clearly will be impaired (e.g., by anesthesia or drugs). That person should be aware of any drug allergies you might have, be able to question the type and exact amount of each medication being given, and keep an accurate diary of such information. Hospitals are very dangerous places to be, especially when you're sick.

I don't mean to sidestep the problem with terrorism, but these are very tangible issues you can address. They will increase your chances of survival and remaining healthy far more than constantly worrying about terrorist activities.

Keep in mind that the purpose of terrorism is to create terror. The terrorists obviously can't destroy everyone, so by creating horrendous events they use a type of psychological warfare. And while the odds of something happening to one of us may be very small, by watching details of the events on television

Great News for Chocoholics

Around every holiday there seems to be a flood of new research about the health benefits of chocolate. Although I never have cared for chocolate, if it turns out to be a healthy treat, it would be a godsend to millions of "chocoholics." By the way, if you have severe chocolate cravings and would like to rid yourself of them, you might want to try increasing your magnesium intake. Often, this alone will help take care of the problem.

One of the latest positive studies, conducted by researchers in Korea, found that a serving of cocoa powder exhibited significant antioxidant properties. Two tablespoons of the powder — approximately the amount in a single-serving package of instant hot chocolate minus the sugars, fats, etc.—exhibited twice the antioxidant capability of a serving of California red wine (140 mL, or almost 5 oz.). It also had two to three times the antioxidant activity of green tea and four to five times that of black tea (each cup made from a 2-gram tea bag). (*J Agri Food Chem*, Dec. 2003)

Just keep in mind that it's the cocoa component of chocolate that appears to produce the health benefits and not the other ingredients that usually accompany it, such as sugar and fat. (A 1-cup serving of cocoa contains just a third of a gram of fat compared with 8 grams of fat in a standard-size chocolate bar.)

There are other studies supporting the antioxidant abilities of cocoa, but most people in the U.S.—or anywhere else, for that matter—don't consume unsweetened, raw cocoa powder. So, if you're going to eat chocolate, don't do so under the pretense of improving your health. If, however, you develop or discover a truly healthy cocoa-based drink, I'll be happy to pass the word along.

we experience these events "firsthand." It's one thing to be vigilant and prepared, but it's also important to always keep the bigger picture in perspective.

HOW YOU SLEEP CAN AFFECT YOUR HEALTH

Based on research I've found over the last decade or so, I'm a firm believer that one day the quality of our sleep will be considered just as important

as our diet, exercise program, stress reduction, etc., when it comes to maintaining optimal health and well-being. In the meantime, I want to share some of the information I've uncovered related to sleep. And if you want to do yourself a favor, start making changes to your habits now rather than waiting for the "official" word.

TIMING IS EVERYTHING

I should begin by saying that our internal clocks don't operate on a precise 24-hour cycle. Research shows that the norm is 24.18 hours. You must experience daylight, darkness, waking and sleep cycles, and other routine patterns for your body to maintain this daily cycle.

Some people have internal clocks that routinely run either over or under 24 hours. These are the individuals who are known as night owls (those with circadian cycles or body clocks longer than 24 hours) or early birds (those with cycles shorter than 24 hours). Many of us believe that we fall into one of these categories, but true night owls and early birds are rare, only about 10 percent of the population falls into these groups.

Our internal clocks regulate a surprising number of processes in our bodies. I want to tell you about two that I find to be most interesting and that are related to some of the other research on sleep that I'll be sharing with you in a moment.

Under normal circumstances, our core body temperature begins to drop gradually four or five hours before bedtime. Then, an hour or two before bedtime, it drops sharply. As it drops, increasing amounts of the sleep-inducing hormone melatonin are released from the pineal gland.

As the evening progresses and sleep sets in, our sensitivity to allergens increases, as does our levels of interleukin 1, one of our body's immune system regulators. But one of the most interesting events that takes place is human growth hormone (HGH) levels reach their peak around 2 a.m.

HGH has become a favorite topic among anti-aging groups. Despite its extraordinarily high price, many people are undergoing HGH injections. If you want to ensure that your HGH levels are as high as naturally possible, make sure you don't eat any sweets or high-carbohydrate foods before going to bed. Studies have

Spike It with Cinnamon

If you're going to have that occasional cup of hot chocolate, adding cinnamon may be a way to help stabilize any insulin spikes. One recent study at the NWFP Agricultural University in Peshawar, Pakistan, found that as little as 1/4 teaspoon of cinnamon daily could help lower blood sugar levels, triglycerides, and LDL cholesterol in those with type 2 diabetes. (*Diabetes Care* 03;26(12):3215-8)

Based on all the previous positive research on cinnamon (and its taste, of course), I routinely add 1/2 to 1 teaspoon to my morning protein shake. It's an excellent, inexpensive, and tasty habit.

shown that doing so will delay the release of GHG during the night or reduce its quantity.

HOW LIGHT AFFECTS SLEEP AND MELATONIN LEVELS

Studies continue to show that exposure to light at night increases the risk of breast cancer and cardiovascular disease. Light at night disrupts the circadian rhythm controlled by the pineal gland. As I mentioned earlier, the pineal gland secretes the hormone melatonin, which has now been shown to exhibit anticancer properties. Melatonin's anticancer effect seems to be particularly effective at preventing hormone-dependent forms of cancer, such as those of the prostate and breast. Melatonin release generally peaks sometime between 1 a.m. and 2 a.m. If you are awake during this time, or even sleeping under bright lights, melatonin production will be suppressed.

A cautionary note: Please don't use this research as an excuse to routinely take melatonin. I know there are some anti-aging doctors and individuals who recommend the daily use of melatonin. I don't. Melatonin is a hormone, and we don't fully understand the ramifications of taking any hormone on a long-term basis. Although melatonin is sold over the counter and generally considered to be safe, it is still better to play it safe.

One recent study found that melatonin use lowers sperm counts. This small, double-blind study took place at the Haemek Medical Center in Afula, Israel. Eight healthy men were given 3 mg of melatonin or a

placebo at precisely 5 p.m. each day for two separate three-month periods. While on the melatonin two men experienced a significant drop in their sperm levels. Before the study, their sperm counts were between 25 and 35 million/mL. While on melatonin, the counts dropped to 3 million/mL in one man and 12 million/mL in the other. The men also experienced a 30 percent drop in sperm mobility. Six months after the melatonin was stopped, one man still had lower sperm counts and sperm mobility. (*J Androl* 02;23(4):572-8)

Melatonin is known to inhibit the production of estrogen, a necessary hormone in both male and female reproduction. This helps explain some of melatonin's role in preventing breast cancer, but in males it may cause other problems that we don't yet fully understand. A hormone—any hormone—should never be taken lightly.

POWER NAPS: A SMART IDEA

Like a lot of other students I knew, I somehow got into the habit of taking an afternoon nap when I was going to college. At the time, I thought it was probably from partying too much the night before, but now I realize I was just re-charging the energy in my brain.

In separate studies, researchers have discovered that the complex carbohydrate glycogen, which provides short-term energy storage for brain activity, declines with either exhausting mental tasks or from lack of adequate sleep. (*J Neurosci* 02;22(13):5581-7) (*Nat Neurosci* 02;5(7):618-9, 677-81)

In one of the studies, three groups of individuals were given identical, exhausting, one-hour visual tests four times daily. A third of the group stayed awake all day, another third took a 30-minute nap at 2 p.m., and the last third took an hour-long nap, also at 2 p.m.

As testing continued later in the day and early evening, those who were awake all day began to take over 50 percent longer to solve their problems than those who napped for an hour. Those who had the 30-minute nap performed about the same all day long. However, those who had the hour-long nap actually improved their performance as the day went on. The researchers found that those taking the hour-long nap spent the greatest amount of time in

the “short wave” sleep phase, which apparently contributed to their better performance.

ANOTHER LIFE SKILL WE LEARNED IN KINDERGARTEN

While hordes of scientists work diligently to decipher such complex things as our genetic code, we still don't understand something as basic as sleep. We do know that sleep is necessary for our brains to encode or imprint what we've learned from the previous day.

These studies also show that, during sleep, brain levels of glycogen are replenished. Although I doubt it will be implemented any time soon, it certainly appears that the productivity of workers could be improved by having them take an hour-long nap in the afternoon. This practice always worked, and still does, in kindergarten and first-grade students. Maybe it's time we all started bringing our sleeping mats to work. I would especially recommend trying this little idea if you work for yourself and have such an opportunity.

Our nighttime and sleeping habits are, without a doubt, a very important tool in our quest to stay healthy. For most of us, it's also an area over which we have control.

NATURAL AID FOR ARTHRITIS PAIN...

Researchers at the University of Miami have found that ginger extract can reduce osteoarthritic pain and knee stiffness as well as the leading prescription arthritic drug, Celebrex.

In a study involving 247 patients with arthritis in the knee, a ginger extract product (Zinaxin) was able to reduce pain by 30 percent in a two-week period, and by 40 percent in six weeks. (*Arthritis Rheum* 01;44(11):2461-2)

The results obtained from the ginger product were comparable to those found in a study where 100 mg and 200 mg of Celebrex (celecoxib) were found to also reduce the pain of osteoarthritis in the knee. (*Clin Ther* 01;23(2):213-27)

One of the biggest complaints in conventional medicine seems to be that natural products either haven't undergone clinical trials or their efficacy hasn't been compared to that of well-known drugs.

Here's a case where the comparison has been made and published.

Not surprisingly, the ginger product is from outside this country. It's marketed by Eurovita International in Soeborg, Denmark. If doctors are truly looking for safe, natural alternatives to nonsteroidal anti-inflammatory drugs (NSAIDs), analgesics, and steroids to combat arthritis pain, ginger extracts fit the bill.

...AND NAUSEA

I've mentioned how ginger capsules can help fight nausea and vomiting in many past issues of *Alternatives*. In fact, I take a couple of ginger-root capsules an hour before and while flying in small planes or boating in the ocean. This trick has kept me from getting motion sickness on dozens of occasions.

Researchers have not reported such uniformly positive outcomes, though. In some studies ginger seems to work well, while in others the results are not as definite. I suspect that these mixed results are primarily related to the quality of the different ginger products and how the ginger was processed.

A study conducted in Thailand a few years ago showed excellent results at stopping the nausea and vomiting associated with pregnancy when using freshly processed ginger. One group of 32 women was given oral ginger at a dose of four 250 mg capsules a day. Another group of women received a placebo. Twenty-eight of the 32 women on the ginger root experienced very significant reductions in both nausea and vomiting, while less than one-third of those on the placebo reported any improvement. (*Obstet Gynecol* 01;97:577-582)

The ginger was prepared from fresh gingerroot. It was chopped into small pieces, baked for 24 hours at 140 degrees F, ground into powder, and packed into capsules. Each woman received a capsule after each meal and at bedtime.

The beauty of using ginger to stop nausea and vomiting associated with pregnancy is that there are few, if any, side effects, and it doesn't affect the pregnancy.

The gingerroot that I've been using lately comes from Penn Herb Co.; 800-523-9971. (If you want to make your own capsules by following the steps out-

Nausea Relief Through Deep Breathing

A couple of years ago, researchers discovered a simple technique to deal with the nausea that is so commonplace in patients recovering from surgery.

Controlled deep breathing appears to be the key. At the time, Dr. Jeffrey Gross and nurse Lynn Anderson were studying the effects of using aromatherapy on nausea. They divided patients into three groups. One group was given gauze pads wet with rubbing alcohol (isopropyl alcohol). The second group was given pads with oil of peppermint, and the third was given pads dampened with a placebo saline solution.

All of the individuals had just completed surgery and were sick. Each was instructed to inhale slowly through their nose and then exhale slowly through their mouth a total of three times. The patient was then questioned two minutes and five minutes later about their degree of nausea. The researchers were surprised to learn that after five minutes all of the individuals reported an average of at least 50 percent improvement. The satisfaction rating of the treatment was 87 percent.

Obviously, the relief comes from the slow, deep breathing techniques rather than anything placed on the gauze pads. Deep breathing therapy has been so effective that it is being used post-surgically in other parts of the University of Connecticut Health Center Hospital, where the study took place.

Although the staff realizes that it is the deep, controlled breathing that achieves the results, the pads are still dampened with rubbing alcohol and the patients are told it is a form of aromatherapy.

lined above, you can get encapsulating equipment from Penn Herb as well.) Keep in mind that ginger-root powder also works for stopping the nausea associated with chemotherapy and radiation sickness. If you don't have success or get marginal results with ginger, I've included another technique for relieving nausea in the box above.

FAIRLY GOOD FOOD FROM FISH FARMS

Our environment and available technology are changing very rapidly. As a result, our food supply is also changing. Ideally, we should all be eating organic, pure, chemical-free foods. It's something to strive for, but, as well as anyone, I understand this isn't economically feasible for everyone.

While organically grown fruits and vegetables are becoming somewhat more plentiful and less expensive, custom grass-fed beef and/or uncontaminated wild fish can be cost-prohibitive for most individuals. If you can afford these items, then God bless you. If you have your own garden, live near an organic farming community, or near pristine ocean waters, then you're even more fortunate. In the years to come, some of these items may be harder to obtain for everyone. As a result, we're going to have to learn to adapt both our diet and our lifestyle to compensate for these changes.

A good example is the world's supply of fish. The fish in our oceans are rapidly becoming depleted. Some areas of the planet have been so over-harvested that the fish populations in those areas may never recover. Mercury contamination is also becoming a major concern. The FDA and other "watchdog" government agencies have issued repeated warnings on the consumption of various fish, including tuna, shark, swordfish, and mahi-mahi, because of possible mercury contamination.

And since mercury is particularly harmful to nerve cells, government health authorities have stressed that infants and small children shouldn't be fed these foods, and pregnant and nursing mothers should avoid eating tuna also. (Although most canned tuna contains less mercury contamination than tuna steaks, which come from larger tuna, it's hard to tell how much, if any, mercury these products contain. Smaller fish are safer, and so are fish like sole, sardines, herring, bass, catfish, salmon, and shellfish.)

To meet consumer demand, fish farms are becoming more abundant. Fish farms are somewhat controversial, and have received a lot of bad press. In reality, they can be very efficient. Farm-raised salmon and catfish are now so plentiful they are often competitively priced with hamburger meat, which can be a godsend to those who were previously unable to afford these items. Farmed fish may not

have EPA oil levels quite as high as wild salmon or catfish, but they are still excellent food sources. And supplemental fish-oil capsules and items like flaxseed can help fill those gaps.

Although there may be a lot of criticism surrounding farmed fish, we need to appreciate the fact that many of our elderly on fixed incomes can now benefit from this source of important nutrients. The essential fatty acids found in fish, nuts, and seeds such as flax are sadly lacking in most of our diets, particularly those of the elderly. Most nursing mothers are now deficient in these precious oils, and, as a result, IQ levels in children are dropping and neurological problems are increasing. In adults, deficiencies result in hormone imbalances and contribute to many of the problems we associate with aging. These oils are not just required for hormone production, they also contribute to proper nerve- and brain-tissue function, clear and flexible blood vessels, and joint health.

Since fish has become more affordable, it has become another widely available, excellent source of protein. Again, this is particularly important for the elderly in this country. The elderly, particularly those on a fixed income, seem to oftentimes get "the short end of the stick" in this country. As the costs of rent, utilities, gasoline, etc. continue to rise, they are often forced to make hard choices, and, as a result, their food choices very often become more limited. Higher-cost protein foods are eliminated, and their health begins to suffer as a result. So in times like these fish farms can provide a valuable, yet inexpensive, option for achieving and maintaining health and well-being.

AN EASY WAY TO ASSESS YOUR RISK FOR HEART DISEASE

When was the last time you took your pulse? Chances are it was while you were exercising or under stress, but other than that you probably haven't given it much thought. As long as it's beating, and not overly fast, there's nothing to worry about.

Well, according to several European and American medical centers, this often overlooked function deserves greater respect—and attention. Not long ago, doctors at the University of Padova in Italy confirmed the results of a handful of previously published studies which showed that an

elevated resting heart rate appears to be a strong predictor of cardiovascular-related death in men. (Cardiovascular-related deaths include heart attack, stroke, congestive heart failure, kidney failure, and anything else involving impaired blood circulation.)

In the recent Padova study, 763 men and 1,175 women aged 65 and older were divided into five different groups based on their resting heart rates. The top fifth consisted of those individuals with resting heart rates greater than 80 beats per minute. The lowest fifth had heart rates of less than 64 beats per minute. Medical histories for each participant were kept for a period of 12 years.

At the end of the 12 years, researchers concluded that the relationship between a higher resting heart rate and deaths from cardiovascular causes was very strong in men, but not women. Among the men, those in the highest fifth (over 80 heartbeats per minute) had almost three times the risk of cardiovascular-related death compared to those in the group with the lowest heart rates. Even after the researchers made adjustments for known cardiovascular disease risk factors, such as a history of heart attack, obesity, high blood pressure, certain prescription medications, abnormal cholesterol levels, smoking, difficulty breathing, and excessive alcohol intake, those in the top fifth of the group still had almost double the risk of dying compared to the bottom fifth of the group. The risks even stayed the same after the researchers eliminated from the equation those individuals who died in the first two years of the study. (*Arch Intern Med* 99;159(6):585-92)

These findings are nothing short of amazing and confirm heart rate research conducted in England, Germany, and the U.S. If you're male, you now have a quick tool to help monitor your risk of dying from heart disease. And while clinical research has not yet confirmed whether this is a reliable indicator for women, the steps I'll outline in a moment can most definitely be used by women to improve overall cardiovascular health.

Cardiovascular disease is killing over one million people a year in this country, and the recent studies on pulse rates have given us our most simple and cost-effective method yet to predict—and therefore help prevent—these deaths.

Unfortunately, most doctors in this country aren't aware of this research. Even if they were, their

Risk Levels for Men Based on Resting Heart Rates

- Below 64 beats/minute = In the healthy range
- 64 to 69 beats/minute = Mild risk
- 70 to 75 beats/minute = Moderate risk
- Over 76 beats/minute = High risk

Most of the studies involved checking the heart rate twice yearly and monitoring changes. I would suggest you monitor it more often (at least monthly) and keep a record of your rates. (If you use a calendar, this is the easiest way to keep track.)

education, training, and compensation steers them to focus on risk factors that can be adjusted with prescription drugs, such as blood pressure, cholesterol levels, etc. Fortunately, your heart rate is one risk factor you can monitor—and lower—on your own.

HOW TO DETERMINE YOUR RESTING HEART RATE...

You can take your resting heart rate right now (provided you aren't exercising or engaged in another form of physical activity). All you'll need is a clock or watch with either a minute or second hand. Find the pulse on the inside of your wrist with the fingers of your other hand. Don't use your thumb because it can have a strong pulse of its own and lead to a false reading. While watching the clock, count the number of beats that occur in a six second period. Multiply that number by ten and you have your resting heart rate per minute.

(Actually, any ratio of 60 will work just fine, such as counting the number of beats in 15 seconds and multiplying by 4. I use six seconds because it's fast and you just add a zero to the number of beats.)

It's very important that you're relaxed while counting, and I would suggest doing so a few times to get used to it. You'll get more accurate readings once you've become accustomed to the process.

Compare your resting heart rate to the chart above to see how you fare according to this latest research. (Again, research to date has confirmed these levels for men only, but women would also benefit tremendously from following the guidelines below.)

...AND WHAT YOU CAN DO TO LOWER YOUR RISK

Depending on your level of risk, there are specific exercise, diet, supplementation, and stress recommendations I would suggest. The differences between groups aren't really the recommendations themselves, as they're all designed to improve cardiovascular health, but more how quickly and strictly different risk groups need to make changes.

Healthy range: If you're in the healthy range, chances are you're already following some or all of the recommendations listed below. Keep it up.

Mild risk: If your resting heart rate falls in the mild risk range, simply increasing the frequency of physical activity in your life should bring it down slightly. Probably the best thing to do is to take a 20 minute walk after meals.

Moderate risk: If your resting heart rate falls in the moderate risk range, I would recommend the following three measures to lower that risk:

1. Step up both the frequency and duration of your regular exercise.
2. Watch for sources of stress in your life, and take steps to eliminate or resolve them. Breathing and stretching exercises, listening to music, and gardening are common stress-reducers. Most people instinctively know what methods work for them. The key is to make it a point to do them.
3. Make sure you're getting the following levels of nutrients each day:
 - 500-800 mg magnesium
 - 800 mcg folic acid
 - 2,000-3,000 mg vitamin C
 - 600-800 IU natural vitamin E
 - 30-60 mg CoQ10 (higher dosage if taken in dry form, lower if softgel)
 - 200 mcg vitamin B12
 - 100-200 mg l-carnitine
 - 400 mg l-aurine
 - 50 mg green tea (or 4 small cups a day)
 - 100 mg quercetin (a bioflavonoid)

- 50-100 mg cayenne pepper (or as a seasoning, if you like spicy food)
- 600 mg garlic

If you're taking a multivitamin, you're most likely getting low dosages of some of these nutrients. You should be able to make up any differences with individual nutrients or combination formulas found in health food stores—just be extra careful in calculating dosages.

High risk: If you find yourself in the high-risk category, it's critical that you begin the following steps **as soon as possible**:

1. Gradually begin a program of regular, low-impact aerobic activity (such as walking and swimming). Stop if you feel pain or have difficulty breathing. As your cardiovascular health improves, you'll be able to exercise longer and with greater intensity.
2. Eliminate and/or resolve stress.
3. Make sure you're getting the levels of nutrients outlined above.
4. Eat foods that support cardiovascular health, such as fish, flaxseed, onions, lecithin granules, eggplant, and soybeans. Eliminate as much salt and hydrogenated fat from your diet as you can. The easiest ways to do this are to switch from frying to grilling or poaching and to use red meat as a side dish or "flavor enhancer" instead of a main course.

One of the most dangerous aspects of heart disease is that it's relatively "quiet." Unlike arthritis, vision or memory loss, or other major diseases, the symptoms of heart disease are often not felt by the individual. As a result, patients have to rely on doctors to monitor their risk with expensive lab tests and office visits. The doctors, not surprisingly, then prescribe drugs to "correct" any problems.

I've said it many times in the past: Drugs do nothing to correct the underlying causes of disease. And that means the risk level remains high (or higher, if you consider the dangerous side effects of most heart medications).

That's why simple, do-it-yourself methods to monitor cardiovascular health are so invaluable. They help us predict risk levels that we can't detect from physical symptoms, and they give us an alter-

native to expensive doctor visits, invasive laboratory tests, and, in most cases, potentially harmful drugs. In fact, speaking of drugs, some of them, such as nonsteroidal anti-inflammatory drugs (NSAIDs), may actually increase your risk of heart problems.

RESEARCH SUGGESTS NSAIDS MAY INCREASE RISK OF CONGESTIVE HEART FAILURE

Dozens of NSAIDs are now marketed under various names. Some are sold as painkillers; others are included as ingredients in cold and flu medicines. Here are just a few names of NSAIDs you might see and take: ibuprofen, naproxen, diclofenac, etodolac, fenoprofen, floctafenine, ketoprofen, metclofenamate, mefenamic acid, piroxicam, and sulindac.

Australian doctors have recently discovered that the use of NSAIDs is a major, unrecognized contributor to heart failure. Doctors at the University of Newcastle found that NSAID use could be the cause of almost 20 percent of first hospital admissions for congestive heart failure. (*Arch Intern Med* 00;160(6):777-784)

Congestive heart failure (CHF) results as the heart becomes less efficient at pumping blood. As blood backs up in the system, fluid begins to accumulate throughout the body. This increases puffiness, particularly in the lower limbs, as well as in the lungs, which can result in difficult breathing, high blood pressure, and pneumonia. As fluids accumulate, the pressure on the heart continues to climb until finally, the heart fails.

In simple terms, salt attracts water. When too much salt is retained in the body, fluid begins to accumulate. NSAIDs decrease the ability of the kidneys to excrete excess salt and water. This begins the process of fluid retention and initiates the beginnings of congestive heart failure. NSAIDs now appear to be the precipitating factor in one out of every five cases of CHF. In the Australian study I cited, the researchers found that the use of NSAIDs in the week prior to admission doubled patients' risk of experiencing CHF. In those with a history of cardiovascular disease, the risk was more than 10 times greater.

And, as you know, heart disease in its various incarnations is one of the most common and most

A Healthy Tip for Aspirin Users

As a subscriber to *Alternatives* you will find out soon enough that I'm not a big fan of the regular use of aspirin. It can cause problems such as macular degeneration, gastrointestinal bleeding, stroke, and ulcers.

I know some of you still take it in an effort to prevent heart attack or on the advice of your doctor. I think it is good used topically to remove warts. And if you don't have access to a teaspoon of Tabasco or a capsule of cayenne (or 1/2 teaspoon of cayenne pepper in a glass of water), chewing half of an aspirin tablet at the first sign of a heart attack could help open the small blood vessels and lessen the damage.

If you insist on taking aspirin, try to do so at night and also take turmeric regularly to help prevent G.I. tract bleeding. Several studies have suggested that 500 mg (approximately 1/8 teaspoon) to 1,500 mg per day is a good maintenance dose of turmeric. Penzeys Spices sells turmeric in bulk quantities at reasonable prices. You can contact them at 800-741-7787, www.penzeys.com.

prevalent diseases of our time. Anyone with a history of heart disease needs to be extremely cautious when it comes to the use of NSAIDs. They may not experience an immediate problem, but NSAID use could trigger events that could come to a head within a week or so. If you have high blood pressure, NSAIDs could interfere with diuretics or other medications given to help normalize that problem. Also, remember we are not only talking about prescription medications, we're also talking about the dozens of over-the-counter painkillers, cold and flu medications, and other "harmless" drugs people take every day.

A VITAL DIETARY COMPONENT WE JUST DON'T GET ENOUGH OF

For years, I've written about the numerous benefits derived from taking lecithin. I consider it one of the core items of my personal health program and I take a tablespoon of lecithin granules every day. If you're not presently taking lecithin, some of the latest research should make you reconsider that choice. And, if you are taking lecithin, you'll be

happy to know that it's even more beneficial than we first thought.

Lecithin is actually a combination of compounds called phospholipids. Roughly 23 percent of lecithin consists of the phospholipid group called the phosphatidylcholines (PCs), with choline making up about 13 percent of the total PC weight. I mention this mainly because the PCs and choline are generally considered to be the "active" portion of lecithin, and most of the research material therefore focuses on these substances. For practical purposes, though, we're really talking about lecithin.

Since we can get lecithin in our food, most traditional nutritionists have never given much attention to the need for supplemental lecithin in our diet. Lecithin, however, is mainly found in the high-cholesterol, high-fat foods. Some of the richest common food sources of lecithin are things like fatty beef steak, beef liver, and eggs—items that have fallen in popularity over the last 20 years or so. With the decreased consumption of such foods, it stands to reason that many of us would also be consuming less lecithin and choline. And, it's often the small changes in our diet that can translate into big health problems further down the road. I have no doubt that this is true when it comes to lecithin.

Two of the primary concerns associated with aging seem to be that of poor quality of sleep and failing memory. Both of these problems can have their roots in lower levels of lecithin consumption (which translate into lower choline levels). An adequate discussion of sleep physiology is too lengthy for this article, but a brief discussion of the brain health benefits you can get from lecithin might be helpful.

STRONG MEDICINE FOR SYNAPSES AND MEMORY LAPSES

I'll try not to get too technical here, but if you recall from biology class, your nerves communicate with each other through junctions called synapses. The nerves meet at these synapses, where a chemical compound called acetylcholine is often used to transmit the nerve impulse. (Acetylcholine is called a neurotransmitter.) These synapses are especially numerous in the brain.

To make acetylcholine, nerve cells require choline. While the nerve cells can actually

synthesize choline from other compounds, or break their own cell membranes down into choline, their best source is to get it directly from the bloodstream. Studies have consistently shown that, by taking lecithin orally, you can increase blood plasma levels of choline—which also causes acetylcholine levels in the brain to increase. (*Science* 83;221(4611):614-20) (*Gastroenterology* 92;102:1363-70)

When it comes to using lecithin to help improve nerve transmissions in the brain, most of the studies have involved patients with Alzheimer's and Parkinson's disease. Truthfully, the results have been somewhat mixed. If there was any improvement at all, it appeared to be in slowing the progression or onset of these diseases rather than in treating them. Hopefully, more studies will be done in the future. When it comes to improving memory lapses however, it appears that regular use of lecithin can be beneficial.

When a group of older individuals took two tablespoons of lecithin daily for five weeks, they exhibited fewer memory lapses and improved memory skills. (*Res Social Work Practice* 94;4:349-58)

In another study involving college students, it was shown that high doses of lecithin (the equivalent of about 10 tablespoons daily) could significantly improve short-term memory skills within 90 minutes of consumption. (*Clin Neuropharm* 93;16(6):540-9)

It's also important to keep in mind that the fat-like components in lecithin are much like vitamin E and other fat-soluble vitamins. In many instances, it can take months for the body to build up a reserve of these compounds and realize their full effects. In other words, if you want to experience the full benefits of lecithin, you will need to take it consistently on a full-time basis.

While there are obviously other factors that influence memory, such as impaired circulation, lecithin certainly appears to be one important piece of the puzzle. Having said that, one of lecithin's greatest strengths just happens to be its ability to protect the circulation system.

IMPORTANT CARDIOVASCULAR BENEFITS

Lecithin use has been proven in dozens of studies to lower cholesterol levels by decreasing cholesterol absorption in the gut and, more significantly, by

actually pulling harmful forms of cholesterol out of the bloodstream. (*J Nutr Biochem* 00;11:461-6) (*J Nutr Biochem* 98;9:659-64)

More recently, there has been a focus on trying to help prevent atherosclerosis (clogging of the arteries) and heart disease by lowering blood plasma levels of homocysteine. This can usually be accomplished by increasing the intake of vitamins B12, B6, and folic acid. However, the choline provided by lecithin has the same effect. Choline is metabolized into betaine, which in turn lowers homocysteine levels. (*Annu Rev Nutr* 99;19:217-46)

In the not-so-distant past, lecithin was the foundation of all treatment programs dealing with circulation problems. Not only could it help prevent such problems, it was often instrumental in reversing some of the most severe existing cardiovascular problems. But for reasons unknown to me, lecithin seems to have fallen out of favor with the pharmaceutical and health food industries. Sadly, I suspect that its lack of popularity has to do with the fact that it is one of the least expensive supplements you can get these days.

MAKE SURE YOU'RE GETTING YOUR LECITHIN

If you are taking a tablespoon of lecithin granules each day, you're on the right track. It's money well spent. If you're not including lecithin as part of your daily supplements, you should start now. It's one product where you get a lot of "bang for your buck."

For daily maintenance purposes, I would recommend one tablespoon of lecithin granules (about 2 grams) a day. To promote optimal heart health, I recommend between 10 and 40 grams—5 and 20 tablespoons—per day, spread throughout the day. Lecithin is non-toxic and the only symptoms experienced at the very high dosages are things like gas, bloating, nausea, or diarrhea. Most of the studies where high dosages were used lasted 6 to 12 weeks. Obviously, blood tests were being regularly performed to monitor cholesterol levels, etc., and once the problem was corrected, the individuals could be put on a maintenance dose.

I recommend keeping the granules in the refrigerator to avoid any problems with rancidity. Fresh lecithin should have a clean, nutty smell and taste. I know some people who actually just swallow the granules. Although I like the nutty taste, I can't do

Build Stronger Bones With This Fruity Snack

Recent research has shown that dried plums appear to stop bone loss, and may even increase bone formation in women.

In a study at Oklahoma State University, researchers had 58 postmenopausal women consume either 100 grams of dried plums or 75 grams of dried apples a day for a period of three months. While there was no change among the women consuming the apples, two significant blood markers for bone formation increased in those eating the dried plums. None of the women in the study were on any form of hormone replacement therapy. (*J Women's Health Gen Based Med* 02;11(1):61-68)

Ovarian hormone deficiencies are quite common following menopause, and this condition is associated with bone loss and osteoporosis. As these hormones decline, cholesterol levels begin to elevate, and the risk of heart disease increases.

An earlier animal study by this same group of researchers found that consuming dried plums could help keep cholesterol levels normal even after the ovaries were removed. (*J Nutr Biochem* 02;11(5):255-259)

They Probably Taste Better Now

Dried plums used to be called prunes, but, after being the butt of a million jokes, that term fell out of favor with the growers. Like most people, I guess, I've always associated prunes with elderly ladies and constipation. And while I love plums, prunes have never been a favorite of mine. I'll have to admit that the term dried plums certainly conjures up a better mental picture—so I'll probably be giving them another try soon.

If you have osteoporosis or you're at the age where it could be a problem, prunes...er...dried plums might be part of the solution to the problem. The 100-gram daily portion works out to about 12 dried plums a day. And if you have a problem with constipation, I wouldn't be surprised to find that problem solved at the same time (it may now be a dried plum, but it still works like a prune).

that. They stick to my mouth and teeth, and I find them hard to swallow. I simply put them in the blender with my protein shake each morning.

The granules are available from health food stores or by mail from Bronson Laboratories, 800-294-5507. Lecithin can also be purchased as a liquid, but it's far more expensive that way.

PROTECT YOURSELF FROM COLD AND FLU WITH EUCALYPTUS OIL

During one of my many trips to Australia, the winter flu season was in full swing. It was an especially bad strain, and after about a week I was suffering like everyone else.

Everybody I encountered had this flu—except for two cleaning ladies in one of the buildings where I was working. They caught my attention because a very strong odor of eucalyptus followed them everywhere they went.

It turned out that each of them was carrying a small rag that had been doused with oil of eucalyptus. Simply breathing those very strong fumes relieved my head congestion and runny nose. I soon found myself following those ladies around just to inhale the fumes!

As soon as I could, I went to the local health food store and purchased a four-ounce jar of eucalyptus oil. I put 8 to 10 drops on a small rag every few hours and kept the rag near me for the next several days until I felt better. It worked wonders!

A TRIED-AND-TRUE GERM FIGHTER

The use of essential oils to fight illness dates back to the Old Testament. In fact, eucalyptus is one of the best-known—and least expensive—essential oils.

The eucalyptus tree (also called the Tasmanian Blue Gum) is an evergreen tree native to Australia. The oil from the leaves has been used in cough drops, cold medications, mouthwashes (it is one of the four active ingredients in Listerine), toothpaste, detergents, and liniments for arthritis pain.

If you've ever used cough drops or nasal inhalers, you've experienced the congestion-clearing powers of eucalyptus oil. Ten to fifteen drops can be added to a vaporizer or to some boiling water on the stove. By

diluting it with other essential oils, it becomes an excellent chest rub for easing congestion and mucus buildup.

Eucalyptus oil can be toxic if taken internally. But because of the potent bactericides it contains, breathing the fumes can knock out infections in the nasal passages, sinuses, bronchial tubes, and lungs with incredible speed.

In addition to clearing air passages, inhaling eucalyptus has been shown to increase the uptake of oxygen from the lungs to the bloodstream. Some of the more volatile compounds in the fumes can enter the bloodstream by way of the lungs, so eucalyptus oil may be helpful in treating other types of infections as well.

If you think you're at risk of catching something, put 8 to 10 drops of eucalyptus oil on your pillow or on a handkerchief and keep it in your breast pocket.

Eucalyptus oil can be purchased in health food stores, herb shops, or on the Web. For catalogs containing oils, contact any of the following companies: Penn Herb Company (www.pennherb.com or 800-523-9971); Aroma Vera (800-669-9514 or www.aromavera.com); Aura Cacia (800-437-3301 or www.frontiercoop.com), or V-Vax (800-342-2044 or www.v-vax.com.)

A PAIN REMEDY FOR PETS

If you're like a lot of folks I know, making sure your pets are happy and healthy is almost as important as taking care of your family. Since my clinical experience is mainly with humans, I don't often write about veterinary breakthroughs. Over the years, though, I've come across a number of beneficial remedies for our furry friends. Here is one of the best I've found.

A DOGGONE GOOD REMEDY FROM DOWN UNDER

A relatively new product called DGP (Dog-Gone Pain) has become a very effective tool in the treatment of pain, inflammation, and arthritis in animals, particularly dogs. The formula has been undergoing testing for more than three years. I have tried the product on my dogs, as well as on dozens of animals belonging to my family and friends. Some of the top veterinarians in Australia have also been involved in the ongoing research. The results have been nothing short of remarkable.

Dr. C. D. (Kim) McKellar of Melbourne, Australia is a veterinarian who has been conducting trials on the product. I've spent a considerable amount of time with Dr. McKellar and have the utmost respect for his work. Not only does he consult for a large multi-center practice, but he has pioneered several surgical, diagnostic, and treatment techniques and is considered one of the top vets in Australia, particularly for thoroughbred and performance animals.

Unlike cats, dogs seem to be particularly prone to joint problems. Arthritis, joint instability, hip dysplasia, spondylosis (bridging or fusing of the spinal vertebra), and inflammation are just some of the joint problems commonly found in dogs. I have yet to see any supplement or medicine—other than DGP—that can help such problems.

HEALING HERBS

DGP contains a variety of herbs, native Australian plant extracts, and an organically processed form of shark cartilage. In addition to anti-inflammatory components, it contains enzymes and raw materials necessary for the repair and growth of cartilage and connective tissue:

- Wild rosella (*Hibiscus sabdariffa*)
- Aniseed myrtle (*Backhousia anisata*)
- Mountain pepper (*Tasmannia lanceolata*)
- Feverfew (*Tanacetum parthenium*)
- Celery seed (*Apium graveolens*)
- Boswellia (*Boswellia serrata*)
- Bromelain (*Ananas comosus*)
- Papain (*Carica papaya*)
- Corydalis root (*Corydalis turtchaninovii*)
- Cayenne (*Capsicum frutescens*)
- Wheat grass (*Triticum aestivum*)
- Turmeric (*Curcuma longa*)
- Shark cartilage (the only shark cartilage produced without the use of toxic solvents)

Finding test subjects for DGP certainly hasn't been an issue. It wasn't as though I had to go to Australia to find dogs with joint problems. The product, however, was developed in Australia (with many ingredients grown or processed exclusively there), and Australia seems to have a greater number of "working" dogs than most other countries. Racing

and other working dogs often develop joint problems earlier in life than dogs kept simply as pets, and any improvement in their condition is easy to detect.

In the DGP tests in Australia, I found that racing greyhounds were able to race and function longer than normal. They experienced far fewer fractures than usual, and any fractures that occurred healed more rapidly. Older, retired racing dogs were often able to return to the track, or at least carry on a normal life after racing. "Cow dogs" previously deemed crippled were able to resume their work activities without any obvious signs of pain, inflammation, or joint discomfort. The same held true for specialty dogs such as those trained for police and military duties. DGP can be a godsend in situations like these, because thousands of dollars are spent selecting and training these animals. This is one product that could help alleviate the suffering of millions of animals.

CANINE FOUNTAIN OF YOUTH?

Based on my experience with DGP, as well as that of others who have had the opportunity to use it, it appears to work rather quickly. It's not uncommon to see changes in dogs within one to two weeks, if not sooner. The changes can be quite dramatic. Not only do the dogs become more active, but one of the most common observations from owners is that their dogs appear happier. Obviously, this is a subjective observation, but it's not unusual for owners to say that their dogs have started to act like puppies again. Their whole disposition changes. In my discussions with Dr. McKellar, he continued to stress the idea that there was a dramatic mental change in the dogs he treated with DGP.

Though generally DGP helps reduce pain quickly, the process of rebuilding cartilage in joints takes time. As a result, DGP is something that needs to be taken on a continuous basis. Tests have shown that if

DGP is stopped, the pain, inflammation, and other arthritic symptoms begin to return rather quickly, usually anywhere from within a week to ten days. I have noticed that the longer and more regularly a dog is given DGP, the longer the residual effect seems to be. But for all practical purposes, DGP should become a regular part of a dog's daily regimen.

WHERE TO FIND DGP

If you are a veterinarian, you would be doing dog owners a huge favor by spreading the word about DGP. If you're a dog owner, you can get the product here in the U.S. DGP is distributed by American BioSciences and sold through The Harmony Company, 800-422-5518. (For international orders, call 203-261-2034.) Each bottle contains 60 tablets, which is a two-month supply for small dogs (those under 30 pounds), and a one-month supply for larger canines. The cost is \$39.95 per bottle, but if you identify yourself as an *Alternatives* subscriber, you'll receive a 15-percent discount.

I don't know of any product that works 100 percent of the time. Amazingly, for the dogs on which I've tried DGP, it has been effective in at least 90 to 95 percent of the cases. The results in Australia seem to be the same. Based on what I've seen, I asked the people at American BioSciences if they would be interested in guaranteeing the product to *Alternatives* subscribers. They have such confidence in the product that they had no problem with the idea. If you decide to try DGP, just let them know you're a subscriber and ask about their money-back guarantee. It's a guarantee I doubt you'll ever have to exercise.

